Electronics

The Cheapest & Friendliest Mail Order Service For The CPC!!!!!

WAVE ELECTRONICS Dept AA9307 1 BUCCLEUCH STREET **BARROW-IN-FURNESS CUMBRIA LA14 1SR**

Tel: 0229 870000 Fax: 0229 829109

leads & Cables

CTM to MegaDrive	.12.99
CTM to Spectrum +2/+3	.12.99
CTM to Atari ST	.14.99
CTM to Amiga	.14.99
MegaDrive Speakers	5.99
CM14 to MegaDrive	.14.99
CM14 to Amiga	.14.99
CM14 to Spec +2/+3	.14.99
CPC Joystick Splitter	8.99
Joystick Extension 1.5m	8.99
CPC to Printer 1.5m	7.99
CPC+ to Printer 1.2m	7.99
CPC to Video BNC	6.99
CPT to Video Phono	6.99

This Month's Special

3" Ex-Software Disks pkt 10

£8.79

All prices include VAT, Carriage & Insurance.

All prices correct at time of going to press.

Offers while stocks last!!! For next day Courier Delivery of any order please add £5.

CPC Disk Games		
Cisco Heat	3.99	
Rock 'n' Roll	3.99	
Back to the Future 2	3.99	
Chartbusters		
Disk 50, 50 Games	13.99	
Ten of the Best Vol-1		
Ten of the Best Vol-2	6.99	
Bonanza Bros	5.99	

Paper Boy 2......4.99 Soft 999 Pack

11 Games & Word Processor Cassette Ver 7.99 Disk Ver 7.99

CPC Cassette Games

Turtles	Coin C	p	 2.99
Back to			

Amstrad DDI-1 Firmware Guide Book 3.99

Graphics & Design

Advanced Art Studio CPC Disk17.49		
Genius Mouse + Advanced		
Art Studio CPC464		
· Cassette Version44.99		
Genius Mouse + Advanced		
Art Studio CPC6128		
Disk Version44.99		

Amstrad Original Peripherals !!!

DDI-1 CPC 464 First 3"
Disk Drive159.99
FD-1 CPC 464/664/6128
Second 3" Drive49.95
FD-1+ CPC 464+/6128+
Second 3" Drive52.95
MP-1 CPC 464
TV Modulator49.95
MP-1f CPC 464 Scart
TV Modulator29.95
MP-2f CPC 664/6128 Scart
TV Modulator34.95
MP-3 CTM 644 Colour
TV Tuner34.95
MP-3+ CM 14 Colour
707 T 707 40 0 700
TV Tuner49.95
MP-3/PSU CTM 640 Colour
MP-3/PSU CTM 640 Colour

CPC System Disks

RS232C+ CPC Plus

Serial Interface..

п	
	CPC 6128 CPM Plus14.99
I	CPC 6128 Dr Logo11.99
	CPC 6128+ CPM Plus8.99
l	CPC 464 CPM 2.2 10.99

GX4000 PADDLES £2.99

GX4000 Cartridges

Mystical	.14.99
No Exit	
World of Sports	
Chase HQ 2	

Hardware & Peripherals!!!

64K RAM CPC 464	.39.99
Expansion Port Adaptor fo	r
CPC+ machines	9.99
40025 6128 Upgrade ROM	for
CPC 464	

Blank Disks

Amsoft 3" Box of 1015.99 Amsoft 3" Box of 10 Plastic
Cases23.99
3.5" DS DD Bulk pkt of 104.99
3" Plastic Cases x 105.99

Educational Soffware

Fun School 1 Under 5s	
CPC Disk	6.99
Fun School 1 5-7s	
CPC Disk	6.99
Fun School 1 8-12s	
CPC Disk	6.99

Fun School 3 Under 5s 5 to 7s Over 7s

All Fun School 3 available on: Cassette 8.99 Disk 12.99

Fun School 4 Under 5s 5 to 7s 7 to 11s All Fun School 4 available on:

Cassette 9.99

Disk 13.99

Printer Ribbons

	X2	X5
LC10	3.99	8.99
LC2410	5.99	13.99
DMP2000	3.99	8.99
DMP4000	4.49	9.99
PCW8256FN	5.58	14.99
PCW9512MS	4.58	10.99
PCW9512FN	4.58	10.99
Citizen 120D	4.99	11.15

Serious Soffware

Mini Office 2

Word Processor, Database, Spreadsheet, Graphics, Communications

Cassette Ver 9.99 Disk Ver 13.99

Touch 'n' Go Typing Tutor Req CPM Plus

Only 7.99

TasWord 6128

Probably the best CPC 6128 Word Processor available

Only 23.99

Microfile/Word

Word Processor & Database 10.99

EXPORT & TRADE

PHONE OUR TELESALES LINE NOW ON 0229 870000

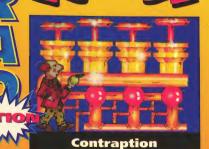
Prehistorik 2 drops in...

of utterly fab software

Amstrad CPC 464 CPC 6128, CPC 464 Plus



D) SORT Records **Instant Recall**



● TOP TIPS ● FIRST RÉVIEWS ● ● BEST ADVICE●

Special five page feature

GREATEST

Discover

world's

the

Your ultimate guide to the very best stuff for the CPC



Ulure Your guarantee of value

publication!

NOT an official Amstrad



They're simply the

Serious



Your first look at the brand new Desk Top Publishing sensation. It might be the answer to all your publishing problems...



Once you've got a 3.5inch disk drive, you'll probably want to put all the stuff from your 3inch discs on it. This is how.



It's sort of like a really knowledgeable friend - sometimes it knows so much you just want to punch its face in.



Who are you? What do you want? How can we help? What do you do? Why do you do it? Where's my blue pen?



Well, slap me with a kipper if it isn't another instalment of our incredibly helpful machine code tutorial.

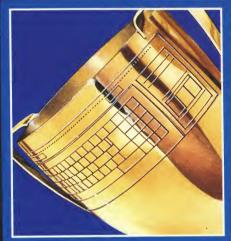


We continue to be astonished by your inventiveness and programming acumen. Astonish yourself by typing these in.



Do you use Protext? Would you like it enhanced at all? This could be the





Main feature

They're simply the best

Amstrad Action is proud to present the awards for the best ever software and addons for the CPC. All the things you REALLY need.

Frivolous

Public Image

We shook a zircon-encrusted stick at it but there was still too much free software. (I don't understand it either. – Ed)



Part two of the 'write your own adventure games' series. No need to type it in - we've put it on the covertape.



More rubbish than the Mangotsfield 'civic amenity site'. And the charts.

Prehistorik II

The game the CPC was made for has finally arrived. Platform fun with a small geezer in a leopard skin bathing suit.



He's dark. He's a man. He's Darkman – p 48. . Fun and games on the high seas – page 50.



Computer game classic? Or a dodgy licence of cult film director Sam Raimi's brooding sci-fi flick? You decide.

Skulduggery and piratical high jinks aboard the good ship lollipop. Or not. Where's Errol Flynn when you need him?

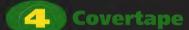
Have you ever wondered how to find all those really great keypress cheats and POKEs for games? Yeah, us too.

Cheat Mode

How to beat computer games without really trying. Also, how to find true love, make a **Emillion over night and create World peace.**



Regulars



The covertape just keeps getting better and better. But, if you want to use Instant Recall and Contraption, you'll have to look on these pages to find out how.

Amscene

We keep our ears very much to the ground at AA, and, as a consequence, a lot of paving stones are able to keep us up to date with all the CPC news.

Small Ads

They're ads. They're small. They start here on page 17. Whatever you want, someone's bound to have it. So check out the Small Ads. You know it makes sense.

Back Issues

If you start collecting AA, it will become, by definition, a collectors' item. Make sure your collection is as complete as it can be by buying some Back Issues. Now.

Subscribe!

Of course, if you decide to be an AA collector, you'll make your life so much easier if you subscribe and have every issue delivered direct to your door.

Reaction

Although it's slightly earlier than usual, it's no less exciting and thoughtprovoking for all that. Go on, air your views, why don't you?

Next Month

According to Benjamin Disraeli, there are three kinds of lies: lies, damned lies and the Amstrad Action Next Month page. At least that's what we think he said.

And the hits just keeps on coming. This month's Classic Collection brings you two utterly fab bits of software. There's a superb database and a terrific platformer...

Instant Recall

Picture the scene: your record collection is getting a bit disorganised, and you can never find William Shatner's version of Lucy In The Sky With Diamonds (although, on balance, this is probably something of a Good Thing). Anyway, things get a little too much for you and you decide that some sort of index system is in order. Or maybe you're a competition addict and you want to keep track of all your entries so that you know when to start getting excited about the possibility of the postman bringing you some tickets to Barbados (hello, Mrs Jones of Coventry, we're talking about you).

But what should you do? How should you keep your index. Can your CPC help you? What you need is a database program. Have you got one? You jolly well have now,

SEARCH DATABASE found records (Y/N) ? nt the records TAGGED ch for TAGGED records

and no mistake.

Instant Recall is an utterly fab database program with all the usual editing and sorting facilities and you'll never lose track of anything again. Is that good news or what?

Whatever your hobby, whatever your job, a database is just the sort of thing you'll never think you wanted until you get one. Then you'll wonder how you ever managed to live without one.

Don't just sit there, read the instructions over the page and get yourself organized.

Contraption



Mmmm. This is going to be a tricky one. When it was released, this excellent

platform game didn't actually have what you'd ordinarily think of as a plot. So, whereas we'd usually tell you the story and try to entice you Into the game that way, we're going to have to think of something else.

But what can it be? We could tell



you that you have to lead a crazy mad bonkers-looking professor person through a set of obstacles and problems. We could say that the obstacles and problems are all very pretty-looking mechanical things and that it's all going to be something of a challenge. Unfortunately, though true, this approach wouldn't be particularly exciting. We could say that if you play Contraption through to the end, you'll find the secret to eternal youth. But that, frankly, would be an outright lie.

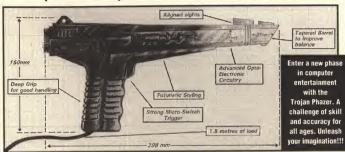
We're just going to have to say that Contraption is a really rather wonderful game. This is, at least, true (if slightly uninspiring) and then just leave you to play it for vourself and find that we're right.

So rip it off the cover, shove it in ver CPC and get platforming.

Just turn the page for all the details ---

TROJAN PHAZER GUN FOR GX4000/464+/6128+

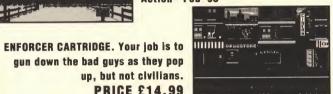
(RRP £34.99) OUR PRICE £29.99



Phazer Gun plugs straight into analogue port (next to joystick port). Comes complete with SKEET SHOOT CARTRIDGE.



each broken up into two normal rounds and one bonus round. See games review in Amstrad Action - Feb '93



SKEET SHOOT consists of 6 levels.



COMPILATIONS

AMSTRAD GAME CARTRIDGES FOR 6128+/464+/GX4000

TITLE	BOXED WITH	UNBOXED NO
	INSTRUCTIONS	INSTRUCTIONS
Klax	£24.99	£14.99
Pro Tennis Tour	£24.99	£14.99
Batman	£24.99	£14.99
Operation Thunderbolt	£24.99	£14.99
Barbarian II	£24.99	£14.99
Navy Seals	£24.99	£14.99
Robocop II	£24.99	£14.99
Pang	£24.99	£14.99
Switch Blade	£24.99	£14.99
No Exit		
THO EDATE		

* Special offers: 10 Unboxed games (As Above) £100.00 *

Amstrad Burnin' Rubber/Loco basic Cartridge	£19.99
	£12.99
Amstrad MM12 Mono Stereo Monitors	£75.00
Amstrad CM14 Colour Stereo Monitors	
Amstrad 464+ Computer Console	
Amstrad 6128+ Computer Console	£85.00
Amstrad Paddle Controllers (6128+/464+/GX4000)	£8.99
Amstrad GX4000 Power Supply Unit	£17.99
Amstrad GX4000 Console	£25.00

AMSTRAD 464 AND 6128 - GENERAL

	Amstrad 6128 Lightpen & Software	£29.99
	Amstrad 0120 Eightperi d Oortware	with CTM644 monitor 620 00
	Amstrad MP3 Modulator/TV Tuner, for	
	Amstrad 464 Light Gun & Games Cass	ette£19.99
и	Amstrad 6128 Light Gun & Games Dis	k£19.99
	Amstrad CT1 Clock Radio	
	Amstrad CPC464 Cassette Mechanism	
1		
	Amstrad 464 Head Alignment Tapes	£9.95
	Tape Head Demagnetizer	£9.99

Prices include VAT, postage and packing

EDUCATION

un with Words 7-.....£8.50 ...£11.95 lead Right Away 1 5-8......£9.95 ...£12.95

CASS DISK

tead Right Away 2 6-9£9.95 ...£12.95 STAR LC24-200 24 Pin Mon/Col.£289.95 All prices include cable & delivery Reter Spelling 9+ £8.95 £12.95



All orders by return: Cheques/Visa/Access/POs Tel/Fax (0952) 462135 TRADING POST, Victoria Road, Shifnal, Shropshire TF11 8AF





O.J. SOFTWARE

Fast Friendly Service

VISA

All printers listed below are suitable for use with AMSTRAD CPC, ATARI ST, COMMODORE AMIGA, IBM PC &

STAR LC24-100 24 Pin Mono£219.9 STAR LC24-200 24 Pin Mono£259.9

PRINTER RIBBONS

Quantity: 1 2 5 DMP 2000/3000...£3.75 ...£7.00 ..£16.25

CITIZEN 120D £3.75 £7.00 £16.25

PANASONIC KXP10/1180£3.75.£7.00 ..£16.25

...£24.95 STAR LC10/20......£3.75 ...£7.00 ..£16.25

...£12.95 STAR LC24-10/20 ..£3.95 ...£7.50 ..£17.50 ...£24.95 PANASONIC KXP1124 ..£3.75 ...£7.00 ..£16.25

STAR LC200 Mono .£4.95 ...£9.50 Star LC200 Colour.£11.95 £22.95

	C	ASS	DISK	2
-	Avon (with Murdac)	£	11.95	FI
-1	Dark Sceptre		€6.99	н
- 1	Famous Five on Tr. Island			D
- 1	Giant Killer Maths Advent	ıre£	15.95	M
- 1	Hero Quest + Ret W/Lord	£	14.95	N
	Last Days of Doom	£	15.95	SI
	Lone Wolf		£9.99	S
	Return to Doom	££	11.95	Н
	_			
	ARCAD			
			DISK	Ç
- 1	Addams Family (128K)	2	14.95	O F A ASS > F
	Captain Blood	£	11.95	N
	Double Dragon III	£	12.95	Ϋ́
	F16 Combat Pilot£	3./5	£/.95	S
	G-Loc (128K) I. Jones Fate Atlantis£		13.95	١ĭ
	Lemmings£1	7.93 2.05	15.95	LF
	Monty Python	2.73	11 05	Г
	Nigel Mansell W Champ £	9.50	12 95	
	Outrup Furona		:13.95	١,
	Paperboy II£	9.50	12.95	BOOK
	Rodland		12.95	9
	Shadow Dancer + Alien Sta	orm	212.95	18
	Sim City		14.95	ľ
	Street Fighter II(Pl	hone)	14.95	H
	Super Monaco G. Prix£	3.75	12.95	

ADVENTURE

JIII 10 DOOIII	. 10
Angens	STRATEGY/SIMULATION
ARCADE	CASS DISK
CASS DISK	Colossus 4.0 Bridge£3.75£7.93
dams Family (128K)£14.95	Colossus 4.0 Chess£3.75£7.9
ptain Blood£11.95	Football Manager III£12.9: Man, Utd. Eur. + J Khan Squash£12.9:
ble Dragon III£12.95	Monopoly£2.99£6.9
Combat Pilot£3.75£7.95	Scrabble £2.99
	Scrabble De Luxe 6128£12.9
oc (128K)£13.95 ones Fate Atlantis£9.95£13.95	World Class Rugby£12.9.
ones rate Atlantis£9.95£13.93	F16 Combat Pilot£3.75£7.9
mings£12.95£15.95	144
nty Python£11.95	WAR GAMES
el Mansell W Champ £9.50 £12.95	
trun Furona £13 95	A

City	DL 1	C14.95	(Ancient Battles + Arnhem + Vu	.can)
et Fighter II(er Monaco G. Prix the Fox	£3.75	£12.95 £12.95	BUSINESS/UTILIT	IES
DISK SPI	ECIALS		Advanced Art Studio 6128 Colour Dump 3 (Col Scr Dump)	£15.95
to the Future II		£6.99	Crash Course Typing Tut 6128	£20.95
o Heat	£2.99	26.99	Discology (Disk Utility)	£12.95
the Duck	£3.75	£6.99	Mastercalc 128 (128k)	£27.95
Corridor		£6.99	Masterfile III (128k)	£29.95
rical		£6.99	Mini Office II£12.95 .	£16.95
		£2.99	Money Manager (+PCW)	
Shore Warrior		£6.99	Prospell	
dow of the Beast		£6.99	Protext£16.95	
of Off-Road			Protype (Print Enhancer)	
age Turtles	£2.99	£6.99	Tas Spell (For Tasword)	
D II		04.00		

HOT 2 HANDLE: Golden Axe, Sup. Off Rd, Tot. Recall, Shad. Warriors£12.95 ...£15.95 2 HOT 2 HANDLE: Corlagen Axe, Sup. On Rd, Id. Rectail, Situation Control State £15.95

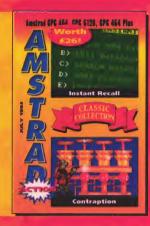
	hes, Microprose Soccer£11.95£15.95
ı	Accessories
K 55 55 55 55 55 55 55 55 55 55 55 55 55	AMX Mouse & Interface
95 95 95 95	Cover Set (state moch & mon)
	MP3 TV Tuner for CTM644 Monitor£34.9

AVIA MOUSE + AUV ATT + MOUSE MUI 254.75	bellet opening / +
Amstrad FD1 2nd Disk Drive£79.95	Lets Play Numbers 4-8£12.95
Amstrad MP1F (464 to Scart TV)£29.95	Lets Play Money 4-8£12.95
Amstrad MP2F(6128 to Scart TV)£34.95	Primary Maths 3-12£24.95
TAbove require RGB input	Fun with Numbers 7£8.50
Cassette Lead (with REM Conn)£3.95	Target Maths 6-13
Cassette Rec + Leads (not 6128+)£23.95	Micro Maths 9-16£24.95
Cover Set (state mach & mon)£8.95	Better Maths 12-16£8.95
Disk Drive Cleaner 3"£5.95	Mega Maths 15+£24.95
Genius Mouse & Adv Art£49.95	Biology 1 12-16£8.95
Joystick Splitter£8.95	Chemistry 1 12-16£8.95
Kboard Ext Leads464 £7.95, 6128 £8.95	Physics 1 12-16£8.95
Kboard Ext Leads 464+/6128+£8.95	French Mistress 11+
Memory Expansion 64K for 464£44.95	German Master 11+
Printer Cable1 Mtr £8.95, 2 Mtr £10.95	Spanish Tutor 11+
Printer Cable 464+/612+ 2Mtr£7.95	Micro English 8-Ad£24.95
MP3 TV Tuner for CTM644 Monitor£34.95	The Three Bears 5+ (6128)
	Five on Treasure Island£9.50
Lovertere	Granny's Garden 6-10 (6128)
Joysticks	Dragon World 6-10 (6128)
COMPETITION PRO MIL.	Giant Killer Maths Adv 9-14
COMPETITION PRO Mini£14.95	Answer Back Jnr Quiz 6-11
CHEETAH Bug£13.95 CHEETAH Mach 1£11.95	
CHEEIAH MOCH I	

3.95 1.95 0.95 7.95 1.95	Physics 1 12-16	£15.95 £15.95 £15.95 £24.95 £12.95	Other printer riphor RIBBON RE-INK BUDGET CASSETT	bbons please ne£12.95 ES £3.75 EACH
4.95 3.95 1.95 0.95 3.95 4.95 0.95 1.95 4.95 8.95	Spelling 6-11 World Geography 11+ Natural History 10+	£16.95 £20.95 £15.95 £11.95 ANS £7.95 £7.95 £7.95 £7.95	Double Dragon II Emlyn Hughes Soccer F16 Combat Pilot Golden Axe Hudson Hawk Pitighter Rodland Streetfighter Trivial Pursuits Turrican II W	Dizzy Yolk Folk Dragons of Flame F15 Strike Eagle F15 Strike Eagle Flimbo's Quest Gunship Lotus Turbo Rick Dangerous II Silent Service Terminator II Turbo Tortoise WF Wrestlemania
J.K.	PLEASE MAKE CHEQUES & POSTAL O	RDERS PA	YABLE TO: O.J. SOFT	VARE AND SEND TO:

gton, Nr. Wigan, Lancs WN6 9RN (most orders despatched by return). Access & Visa orders tel/fax on 025 DNE/FAX OUTSIDE HOURS). OVERSEAS ORDERS WELCOME (SOFTWARE ADD £1 PER ITEM POSTAGE; PAYMENT BY CREDIT CARD, EUROCHEQUE OR BANK DRAFT)



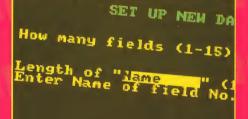


Instant Rages

Get your life together in a way that only AA knows how - with a lovely database!

You wanted serious software (you did. didn't you?), well, we've managed to track down a fully functional, high powered, and easy to use database for you! It's the package of a film as well. Instant Recall!

First off, for all those that haven't done this sort of thing before, we'd best explain just what a database actually is. Quite simply, a database is a program that emulates a filecard index system. You can set up a standard card (or a record, as we call it), with a number of information titles (or fields), and store information on that



etting up your fields is very important just ask any farmer, and they'll tell you.

In case you're wondering, the ability to

enter field lengths serves a very vital

purpose in the memory department. The

more records you can store in memory at

However, if you don't think you're going

shorter your field lengths, you see, the

once, and the faster the whole package

can run when shifting your data about.

to have a massive amount of data to

field lengths.

store, feel free to have absolutely huge

card layout. For instance, for an address system, the normal fields would be name. address, post code, phone number, etc.

Now, the beauty of having a system like this on computer instead of a pile of file cards is that on a computer database you can sort information, search through the entire information volume for the card containing particular information, update and edit info, and basically do with it what you want. The advantages are very much similar to using a word processor over a pen and paper, in that the computer angle allows much more flexibility.

Anyway, how do you use it? Right... When you first load it up, after the little credit screen (that, incidentally, you can press any key to bypass), you will come up against the main menu. This runs as follows:

A - Setup new database

Memory

In this part of the program, you specify the various field titles, lengths, and types of the information to be stored. Before you do anything else, it's important that you complete this section first, as you can't store any information without first specifying what information is to be stored.

PRINT any found record

Do you want the record

Just search for TAGGE

Should CAPITAL letter equivalent to LOWER C

The only real drawback is the colour

scheme on some of the screens (euch!)

SEARCH DATA

HASTANT RECARD

A) Setup NEW Database

B) EDIT Database

C) SEARCH Database D) SORT Records

E) LOAD/SAUE/CATALOG

Main menus, eh? They come to your country, and none of them have got jobs.

B - Edit database

This is the main data entry mode. It is under this option that you enter new cards (in our case, names and addresses), and you shouldn't have too many problems using the on-screen help system within the program.

It's also useful for editing existing records, re-arranging data, tagging (marking for reference) records, and the main bulk of data entry/manipulation operations. The menu here is fairly straightforward, and we'll go through that now. Bear in mind also, that at any time, pressing ESC will take you back to the main menu.

A - View current record Simply look at a record.

B - Add a record

Make a new record, and add it to the

C - Amend current record Alter information on a card.

D - Delete current record Remove a card from the database.

E - Insert a record at current position

Instead of simply adding a record, this option allows you to insert it at a specific point in the information stack.

F - Replicate current record

If you want a record to be duplicated. maybe so you can change one piece of information on the card, instead of re-typing the whole thing, this is the option to use, really.

G – Go to specific record number

Simply move your attention to a different record.

H - Clear all tags

Remove all tags placed on records from

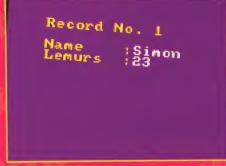
C - Search database

Searching records is one of the functions that gives a computer database the advantage over paper. You simply enter the information to be hunted down, whether you want it printed or tagged, and off it whizzes!

D - Sort records

This option might seem a bit complex at first, but if you go into this simply, it's not too bad. You will be able to specify the field you wish to sort the records by, and whether you want the cards in ascending or descending order (in most cases, this means alphabetical or reverse alphabetical).

If you don't want to specify a second priority field, simply press return when asked for one, and the program will sort your files. If you do (if you want to sort the records by one field, and sub-sort them by another), enter the field number, and whether the sort is ascending or descending.



Well, you know what they always say – "A lemur in the hand is worth 23 in the bush"

E - Load/Save/Catalog

In other words, the general filing menu, through which you can load and save files, and catalogue discs.

F - Printer Options

After selecting this, simply answer the questions on your printer, and how you wish your data to be printed out (such as paper width, etc).

G - Modify database settings

Here, you can alter any of the information you entered through option A, if

And, as always, we here at AA we get the distinct impression they may well be right.

you made a mistake, or want to alter field length at a later date, if, for instance, you have a little more information to enter than you previously thought, and want to lengthen field lengths, or even add a new field.

H - Display database information

This tells you simply what's going on with the information you've got stored.

Don't forget, there's still a prize for the most unusual use of any business software.

Venture Forth

Venture Forth is our utterly fab series on adventure writing. We started last month with moved on to deal with room descriptions. If all goes well, by the time we've finished we'll have designed a complete (if small) adventure game from scratch and you'll have a little bit of an idea how to go about creating your own.

Oh no, we're going to be in trouble now!

What we've done, you see, is written a program to go with the Venture Forth series, and, well, it sort of got too big to list in the feature itself, so we sort of put it on the tape. Oh well, it's done now.

The program, rather imaginatively, is called VFPROG.BAS and it's on side one of the tape, straight after Instant Recall. So just load Instant Recall, reset the machine, press CTRL and ENTER and the adventure thing will load for you. Hurrah.

It's there so that you can see a little bit more clearly how we've done the actual

You wake with a start ght light shining in light shining in list like the sun. Oh no light salready late in you've got to get all e and get round to you se for lunch. You'd be you get dressed wish! everywhere, bits of (rbike all over the fl age, you

And now, live to you from the cover tape of the stars, Venture Forth!

programming bits, because we think that's important. And if you fancy trying it out for yourself, or even improve it a little, you can.

Can you do better?

If you do think of any improvements or if there's anything you want us to explain/cover in more depth/cover at all, then drop us a line at the usual address and we'll do our best to include it in a later bit of the feature.

Contraption

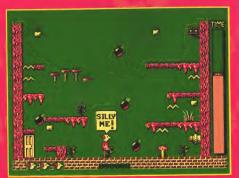
I'd like to begin by discussing, clichéd though it may be, the work of Sigmund Freud. I'd particularly like to discuss the subconscious. Freud believed that the subconscious mind, as a separate entity from the conscious 'waking' mind, could influence the thoughts and thought processes of the individual, without their being aware of its interference.

This subconscious mind, then, worked very well as a defence mechanism against knowledge or conclusions that may be mentally damaging, or overly distressing. One perfect example of this would be PE teachers, whose entire world would undoubtedly come crashing down around their ears if they finally realised that their

huge misconception about the world. namely that young teenage boys live, breathe and sleep for intense physical exercise and red hot showers, was completely and utterly wrong.

So where does this leave us? Well, all that slightly scary Freudian stuff is a vital plot element in what you're about to read, as mild mannered Bernard, the government research scientist, was at work in his office.

Anyway, Bernard was sifting through mayonnaise consumption diagrams, and correlating them with edited highlights of the last national census (it's about to happen), when a thought suddenly struck him (any minute now). With a slight facial crumple of horrible realisation (wait for it),



I quite agree... Silly you! I mean, you should no better than to tread on flowers! Tch!



screen before the spiders get you! Aaargh!

he stammered in slight surprise "Nobody's in the least bit interested in any of this nonsense!" (I knew it! Sigmund was right! This is gonna be a real doozy!) It was from that point on that Bernard started to go

You see, from the day he turned 23, Bernard had been working on mayonnaise consumption. He was now 47. Each year, he turned out a comprehensive guide on that certain eggy product, whilst receiving a blank look from the ministry of health (who commissioned the research), who filed his report neatly away, completely unread (Oh no! The double whammy!). It was this thought also that was slicing Bernards life very finely, and serving it with a certain oil based salad dressing.

Now, there is a lot of rivalry in the Foodstuff Research Institute that, though relatively suppressed ever since the mushy pea murders, really comes out in instances



I'm really not all that sure I know any good (or funny) apple jokes... (I'm so glad. - Ed)

like this. The quiet vying for the position of Head of Courgette Developments is always tempting researchers to take a few 'extra steps' to reduce the competition a little. And so when a fellow researcher finally goes fruit loop, it's always best to make sure they go under completely. So the apple research team made sure. I won't go into too much detail, suffice to say that Bernard returned from the coffee machine to find his room re-decorated in one of 57 varieties - the one that begins with 'M'.

To most normal people, this would seem like a mere prank, but to Bernard, this was definitely not the case – if not for the fact that he was never really all that well humoured (his wife and children will testify to that), for the fact that the liquid we are so repetitively reminded not to save for the salad was not on Bernard's list of things he most wanted to see right now.

I think we can safely assume the mix of



Oh arr yeah - there's this apple w

hatred, anger, and despair flowing freely from Bernies mouth. Revenge. But how? Apples – I'd like to see them research without any material! It'd be like a computer magazine without a screen grabber!

And so, evil Bernard set about his dastardly deeds - removing all apples from the building. He found instructions on keys and stuff in the program, and went round collecting all the apples he could find. The Apple team had nothing to do, since Bernard had made off with their stock, and took out a subscription to AA.

Bernard, of course, was taken into care shortly after his funny turn, but not before having his stomach pumped (in case you were wondering what he was doing with a building full of apples) and his fingers prised out of the office ceiling (apples contain lots and lots of natural sugar, you know).

So why is it called Contraption? Well, the mind is a strange and terrible thing...

If you're not sure what you're doing, start here.

COVERTAPE

Just pop the tape into your machine, making sure it's rewound to the start of Side 1, and then press CTRL + ENTER (or type RUN""), then press any key and the tape will start loading.

Within a few moments you get a menu screen. Choose the program you want using the Spacebar, then hit the RETURN key.

- Note that none of the programs need be loaded directly from the main menu. They can all be run from BASIC. The menu lists them, but you must quit back to BASIC to run them. (Use the RUN"(filename)" command.)
- If you have a disk drive either built into your machine or plugged in, you will first have to type Itape to switch the computer to tape loading. You get the I character by pressing SHIFT+@. Then just proceed as normal.

Oh my word, the tape won't work!

We go to great lengths to make sure that our covertapes work properly. However, if you still have difficulty, try this:

 Loading at several different volume levels (if you're using an external tape recorder) Cleaning the tape heads. This can be done with any commercially available cleaning kit Adjusting the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Turn it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.

Tapping the cassette gently against a table edge - the spools may be sticking or jammed.

If you still can't get the tape to load then send the tape, along with a brief description of the problem and a stamped sae to:

AA94 Covertape Returns, Ablex Audio Video Ltd, Harcourt, Halesford 14. Telford, Shropshire

Psst! Want a disc version?

The covertage contains its own tage-disc copying program. To transfer the programs to tape, simply follow the instructions on the tane. 464 owners with external 3-inch drives will have no problems, but 6128 owners will need a cassette player with a REM socket. Stopping and starting the tape manually is difficult.

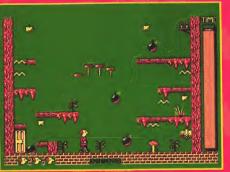
 6128 Plus owners who've had their machines modified to load from tape can transfer the programs to disk, but must rewind to the start of the tape again before the transfer starts.

You can also order a disk version of the covertape from our duplicators, Ablex. Snip off the coupon on the corner of this page and send it with a cheque/PO for £2.00 to:

AA94Disk Offer, Ablex Audio Video, Harcourt, Halesford 14, Telford, Shropshire

TF7 4QD

Please don't return tapes to the AA office. Thanks



care shortly after designing this level

All the CPC news that's fit to print. Probably.



Oh, hello

I was sitting at my desk the other day, minding my own business, when someone wandered by and asked me which issue we were working on, "Number 94," I replied.

"Oh," he said. "So you'll

be thinking about number 100 soon, then?"

And he was right, we shall. We'll be one of the few fun computer magazines ever to reach issue 100 (if, indeed, any others have - we ought to research that) and we're going to make it as special as we can. So if you've been reading the mag for a while and you'd like to share any memories with the rest of the readers, then drop us a line - we'd love to include you in our celebrations.

Down Under

We've just received information on the Sydney Amstrad Computer Club who, as you've probably guessed, are in Australia. They've got all the usual user group benefits and schemes, and are completely dedicated to the CPC.

You can find them on

02-5609487, and 02-6617573.

Aussie readers should also check out this month's Reaction pages for some details of a planned new fanzine that someone's planning to do just for you.

Thanks Pete!

All you Plus owners who've been weeping silent tears into your pillows can thank Peter Campbell for an incredibly useful nugget of info: Though Plus owners cannot use ROMDOS on their machines in conjunction with AMSDOS, they can use RAMDOS+ under CP/M to access high

density discs.

Apparently he discovered that while he was messing about one day. Thanks Peter – this should help guite a few frustrated readers out.

Presto PD (again)

Cockett, Swansea, SA2 OXA.

We've mentioned this elsewhere, but it's probably worth repeating here.

Presto PD, the library with the, erm, most, has just announced two new products. First up is IFFCon. This is a package that converts IFF picture files (Amiga, Macintosh, etc) to CPC format. Next, there's DOSCopy - a package that transforms MSDOS files into AMSDOS format, and vice versa. Both titles are at 25p per side, so you should be able to get both of these on one disc or a mere 50p! Oh yeah, you can also buy 3" discs from them at £1.75 each. Find Presto at 58 Graigluyd Road,

Life, huh?

It's with a tear filled eve that we must bid a fond farewell to a long-standing computer supplies company, MJC Supplies, who supported not only the CPC but the Amiga, ST, PCW, PC etc.

The situation with orders is as follows: any orders for which cheques have been cashed will be filled, no matter how long that takes. If your cheque wasn't cashed, however, the odds are it never will be

It's unfortunate to see a company as good as MJC suffer, but these aren't good times for any businesses, Cheers, chaps, we'll miss you.

Siren news file

We've been talking to Simon Cobb of Siren Software quite a lot lately (we forgot to send his 3.5" disk drive back - oops) so we've managed to find out quite a bit about what's going on up there in Manchester

For a start you'll get a free RS232 Serial interface and cable (worth a couple of pence short of 70 guid) with every Amstrad NC100 Notepad you buy.

The standard 3.5" drive (with all the bits you'll need to get you going, including RAMDOS) has tumbled in price to £59.99.

And ROMDOS XL version 4 has just been released at £29.99 on disc or £39.99 on cartridge (that's a single socket ROMbox cart, not a Plus-type cart).

Evidently the offers close on 1 September 1993 and you should speak to Simon Cobb on 061 724 7572 if you want to know more.

And that's shallot. Or something.

Hassle-free AA buying

...is just a moment away.

The dog ate your best shoes and, when you finally managed to get down to the shops, they'd sold out of your favourite magazine. No problem, fill in the form.



Please may I have my very own Amstrad Action?

Dear Newsagent, could you please order me a copy of Amstrad Action, starting with the August issue, out on July 22nd. Amstrad Action is published by Future Publishing, and you can order it from your

Иy	ame
Иy	ddress

MY TIME. BUY NOW! IT'S BYE NOW.

it was an outright winner. No one has ever come up with such a powerful, useful add-on. Labeled the ESSENTIAL CPC COMPANION, this MULTIpurpose interFACE proved to be an absolute Godsend for the Amstrad CPC users. Remember the first disk drive on the CPC 464? Suddenly the loading took seconds rather than minutes from tapes. Except that there was not much to load - very little had originally been released on disks and there was no facility to transfer programs from tapes to disks.

THE SAVIOUR

This is one area where the MULTIFACE saved everything - literally. The black magic box could stop anything any time and SAVE it to disk or tape. When the 6128 came with a built-in drive, it was left again to the MULTIFACE to do all the transferring - and to perform other miracles... So, in case you just came from Mars, what

does a MULTIFACE do? First, it sits at the back of your CPC, its magic button always ready. Press it, and the MULTIFACE takes control!

ACTION!

Once in action, it freezes everything and it displays its own menu. Being fully menu-driven and error-trapped, you'll probably never need the full manual that comes with the MULTIFACE Most operations are also entirely AUTOMATIC, so to SAVE a game once you stopped it, you iust *name* it, insert *disk/tape*, and press a key. You can then *return* and *continue* the program If you get beaten later on, just reload from where you saved last and play just from there again! No need to go back to the start all the time. Or even better, the Multiface allows you to POKE

INFINITE LIVES

listed in this magazine and you'll never loose. The MULTIFACE comes with a built-in TOOLKIT that lets you inspect/alter/dump the CPC RAM. It also has its own 8K RAM and 8K ROM Many top programs were written with the aid of the TOOLKIT and the extra 8K RAM. And do you like the screen shots in this magazine? They are all produced using the MULTIFACE!

pull out of the 8-bit market, the surge of interest in the MULTIFACE was such, that we had to make many more. And not just the MULTIFACE - we also have the one and only disassembler,

THE INSIDER

that lets you see and alter what happens any time anywhere inside a RUNNING CPC program. This is a unique de-bugging/development aid. It comes on a disk and loads inside a MULTIFACE. Press the magic button and the INSIDER will disassemble, find text/code, dump the CPC RAM to printer, etc. Get it at HALF-PRICE for £7.95! As this goes to press, we still have plenty of stock of both the MULTIFACE and INSIDER. However we can't go on manufacturing for ever. The MULTIFACE is terrific value, in fact more for the customer than for the manufacturer... So

HURRY!

In any case we will only accept orders when we can supply the goods and we give a full guarantee. Plus we still offer up to £15 OFF! mail orders!

You MUST NOT use our products to copy, reproduce or infringe in any way whatsoever any copyright material without the permission of the copyright owner. We do neither condone nor authorise the use of our products for the reproduction of copyright material - to do so is ILLEGALI l order a MULTIFACE 2 for CPC 464/6128 2 247.95 £34.95 or for CPC + 249.95 £34.95 PLUS P&P per item: UK / Europe £2 Overseas £3. RODOS 229.96 £14.95 RODOS XTRA 29.96 £4.95 INSIDER 214.96 £7.95 l enclose a cheque/PO/cash for £...... or debit my Access/Visa No.

ROMANTIC ROBOT, 54 Deanscroft Ave, London NW9 8EN 🚳 24 hrs 👡 🚥 081-200 8870 🚳 AA

ROMBO DISCOUNTS

ROMBO ROMBOARD Now only £25.00

The most widely used of all Romboards. 8 sockets; on/off switch for each; high 8 or low 8 ROM slots selectable; facility for a ZIF socket or 16k RAMROM.

DISCOUNTS

20% - with the Dual-Mode Drive 10% - with ROM software valued at £20 or more.

EPROM PROGRAMMER with ejector socket - £30 with ZIF socket - £35

Programs 8k and 16k, 12.5v and 21 eproms; full eprom, part eprom and single byte programming; ROM file editing. Supplied with easy to use menu driven Software, PD games ROM file, utilities to turn Basic and machine.

32k RAMROM - £14.95

32k of RAM in two 16k blocks. Each behaves like a ROM, surviving resets, when loaded with ROM software. Ideal for testing ROM programs without the need to blow/

ROMBO **VIDEO DIGITISER** Now only £65.00

Captures video pictures from a video recorde camera or TV with 'video out' to computer memory. Manipulate pictures, save to disc, us in programs, print out, etc.

ROMONOFF SWITCH - £7.95

ects to the expansion port to turn all nal ROMs OFF or ON as needed. Not

AVATAR

M\$800 is the number one high capacity formatter, allowing up to 800k storage per 3.5" disc. It is the ONLY one that doesn't need to be present for its discs to be used, the ONLY one that is compatible with all software including CPM, the ONLY one that uses no memory whatsoever, the ONLY one that can use its discs in drive A (ABBA switch users, please note), the ONLY one that works with the Plus machines. It is supplied with its own copying utility and a menu program that allows many tape to disc transferred games to run from drive B. Check these features against any alternative and you'll see why M\$800 is simply the best.

ROM for disc owners (proof needed)

39 CROSSFELL ROAD, LEVERSTOCK GREEN, HEMEL HEMPSTEAD, HERTS. HP3 8RG Phone: 0442 251705

Monday to Friday

Now includes 22DISK - the No. 1 CPC/PC/CPC file Also includes:

* M5800 on disc * M5800 on ROM

* 10 blank discs * carriage

Pound for pound the best value ground

Our superior drives do everything that all other 3.5" drives do - and more besides!
CHECK OUT THESE FEATURES:
MODE 2: Full, unimpeded use with Rodos, Ramdos, Romdos and Romdos XI, giving up to 800k per disc without the need to use the SIDE SWITCH. The statement elsewhere that "other drives. . . . will only allow you to access 400k at a time" is a lie as many who have resorted to adding their own side switch to inferior drives can confirm. Full use of MS800, the no. 1 high capacity formatter - 800k per disc at 400k per side. MODE 1: works as a complete alternative to the FD1 B drive - 180k per side. Without the side switch, mode 1 is not possible.

OVERALL: Ultra quiet mechanism, the type used in most professional computers; super small; separate power supply;

professional computers; super small; separate power supply; sleek metal case. You need to buy nothing else to use your drive immediately. MSB00 is supplied on disc and ROM whether or not you have a Romboard - see the ROMBO DISCOUNTS.

464 PLUS 1st drive - see this ad. £79.95 Old 464 1st drive - not suitable.

Please state your computer model when ordering. complete

464 PLUS 1st DRIVE - £120

BONZO SUPER MEDDLER 3rd DRIVE SWITCH. 12 95 ARRA SWITCH 12 95

SIDE SWITCH (kit).

3" Amsoft discs

SIDE SWITCH (plug-on)

ABBA & SIDE combined

3" individual disc case..

3.5" disc 10 for £7.50

64k RAM PACK (DkTronics) ...

..3.00

.5.95

..14.95

10 for 20 00

..10 for 5.95

...39.95

30 for 20 00

Dual Channel

RS-232

with

software

£39.95

tionally good tape to disc transfer utility, very on-disc database of verified transfers. es stand-alone transfers.

BONZO BLITZ

nsfers all varieties of SPEEDLOCK tapes onto c, producing *stand-alone* transfers. On-disc abase of verified transfers. Includes 4 adventure

BONZO'S FLASHPACK

Over 60 additions to Basic, some very powerful. Flash Basic's commands can be used within your wn Basic programs but does not need to be Individual 3" disc cases

esent for the program (book style opening) MAXIDOS 10 for £5.95

including p & p and effective general disc utility available for the CPC. All features work with Amsdos, CPM, Ramdos and Romdos. Includes:- disc/file copy, disc optimise, CAT inc. erased files, restore erased files, disc editor and much much more. he ABBA switch swaps the A and drives around; the 3rd DRIVE SWITCH allows a 2nd B drive to be connected; the

BONZO'S BIG BATCH Fast, flexible Database; superb pools pred screen and sprite designer.

.13.93 LASHPACK BIG BATCH. .9.9 22 DISK PC/CPC/PC transfers ...5.00 **ROM SOFTWARE**

PROTEXT £30 MAXAM **PROSPELL** £25 MAXAM 1.5 £25 PROMERGE PD GAMES ROM (2 games) 6128 UPGRADE ROM

MAJOR CREDIT **CARDS TAKEN** No callers

Dual-Mode capability.

SIDE SWITCH converts inferior drives t

464/6128 PLUS

Low cost INTERNAL disc/memory upgrades D.I.Y. kit

Done by us **464 PLUS** 15.00 30.00 25.00 40.00 6128 PLUS 18.00 30.00

Together with the 3.5" drive, this is the lowest costing 1st drive by a very wide margin.

Please write or phone for details before sending your computer.

Design 2

Campursoft 041 554 4735

Tim Norris takes a look at the preview version of something that could change the face of CPC DTPing.

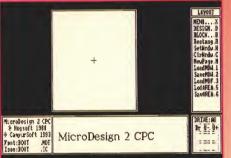
A few years ago a program arrived that set the PCW world humming with excitement. It was Micro Design 2 and it wasn't really the sequel to Micro Design. The original had been a graphics program for designing electronic circuits and MD2 was the hottest ever desktop publishing program the PCW had ever seen. Now, thanks to those nice people at Campursoft, MD2 is about to arrive on the 128k CPCs.

We've only seen the Beta test version where only some of the features have been implemented, but it already looks rather fab.

The finished program will have full page design capabilities, allowing the user to import



Graphics can be imported from the PCW very easily. This is part of a larger drawing.



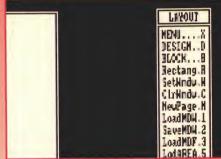
As a preview feature, the bit at the bottom says 'Micro Design 2' in your chosen font.

graphics and text from other programs or to create them from within MD2 itself. There's quite an impressive-looking set of graphics tools and a comprehensive typesetting function.

It doesn't look as if any but the most basic of word processing facilities will be included, but text imported from outside can be typeset in a number of character sets (fonts) with full user control over character size and spacing as well as line spacing. Graphics functions include the usual shape drawing as well as fill, paint, and zoom (which allows half-pixel editing).

If your friend uses MD2 on the PCW you'll be able to import files created on their machine (.MDA files) provided they're not too big, as well as files from Stop Press. As with most DTP programs it works best with a mouse, but I tried it without and it's almost as easy to use.

MD2 deals with the page as a whole, unlike many DTP systems which treat text and graphics



There are plenty of tools to choose from and they're all accessible from this menu.

separately. Once text is typeset (ie once it's been flowed onto the page) it becomes part of the page and can be edited only as graphics, not as text. So if you spot an error in the text once it's on the page, you have to remove the text, edit it, and then flow it back onto the page again. One thing that will certainly be impressive, though, is the way MD2 flows text around pictures.

I'll have to wait until we get hold of the finished version and run some comparisons with the competition before I rave too much but, at the moment, it's looking as if MD2 is going to be well up there with the best of them. We've noticed something of a leap in the number of fanzines out there and there's no getting round the fact that a lot of them could do with a bit of pepping up, design-wise. There's no way of knowing, yet, whether MD2 is going to be the program to help do that, but it's certainly going to be one of the major contenders.

DARTSMA

Fax: 081 317 3662 (Att Adam) Phone: 081 317 1170 (10am-2pm

LEADS

Flexi-Extendi - Use CPC Hardware on the 6128/464+
CPC 464 to Plus monitor lead
464/6128+ to CPC monitor lead £15 £9 £9 £9 £8 £8 Joystick Splitters CPC Printer leads (1m) PLUS Printer leads (2m) RS232 1-1 25 pin (2m)

JOYSTICKS

The Tortoise joystick The Bug joystick 125+ joystick

PRINTER RIBBONS

£3

DMP 2000/3000/3160 STAR LC10 STAR LC24-10 PCW 8256/8512 SEKOSHA SP1900 CITIZEN 120D PCW 9512 (MS) EPSOM LX800 OKI 390/391

CATALOGUES

TICKETS WITH EVERY ORDER IN JUNE

£9 £14 £8

CLIPART - PRINTED -£1.50 PD - PRINTED SEND SSAE PD - DISK SEND A 3" DISK SUPPLIES CATALOGUE **FREE TICKETS - LIMITED OFFER** ALL FORMATS COMPUTER SHOW

PRICES ARE FULLY INCLUSIVE

DARTSMA (AA93). 47 KIDD PLACE, CHARLTON, LONDON SE7 8HF

100%

Amstrad CPC

100%

Active users

100%

Read from cover to cover

100%

Ideal to advertise your products

Call Jackie or Rob on 0225 442244

100%

Confident it will work for YOU

ONLY £159.99

FIRST DISK DRIVES FOR THE CPC464/464

Includes 3.5" or 3" (please specify) disk drive, DDI-1

interface, connecting leads & utility software. Simply plug in

and go! Full instructions and 12 months guarantee. Please

DISK DRIVES

state CPC464 or CPC464+ when ordering.



Free MULTIFACE II (RRP £35) for copying tapes onto disk with every 3.5" first disk drive. Free CHERRY PAINT (RRP £15) with every 3" first

3.5" DISK DRIVES FOR CPC464/664/6128/6128+

Slimline, whisper quiet Panasonic drive mechanism. Comes complete with 16 page manual & Ramdos to allow you to format and use 800K per disk (without any side select switches) just like a PC, Atari ST, Amiga etc.

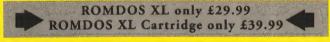


ROMDOS XL - The New Standard

ROMDOS XL is undoubtedly the best high capacity disk operating system that is available for your CPC464/664/6128 with a 3.5" second drive.

Unlike other operating systems, ROMDOS XL will allow you to use 800K without the need to use a side select switch or turn the disk over, even under CPM!

- Built in disk formatter.
- Built in file copying/erase.
- Full 19 page printed manual
- Auto detects disk format.
- Uses no user memory.
- Fast and reliable.
- Built in Sector
- /Directory editor. Very simple to use.
- Available on ROM or in cartridge form.
- Cartridge version works on 464/664/6128.
- NOT 6128+ compatible.



Also available....

PC-TRANS Tranfer files from a CPC to a PC and vice versa.

HACKIT Excellent hackers/machine code programming cartridge. Only £24.99

RS232 SERIAL INTERFACE Can be used to connect your CPC to another computer, modem, serial printer etc. Ideal for use with Amstrad NC100 Notepad. Full ROM software built-in, excellent manual. Fully Only £59.99

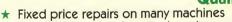
Please add £5.00 postage and packing to all disk drive orders. All major credit cards accepted. Immediate despatch for credit card orders.

SIREN SOFTWARE, WILTON HOUSE, BURY RD, RADCLIFFE, MANCHESTER M26 9UR

TEL: 061 724 7572







- ★ Over 2500 square foot engineering complex |
- ★ Top quality technicians at your disposal
- * All work warranted
- ★ Fast turnaround
- ★ Simply post or hand deliver your machine and we will do the rest
- Collection Service available Please supply evening and daytime telephone numbers

Amstrad 464 Amstrad 6128

£41.00 (extra if disk drive needs complete replacement)

£15.00 Diagnostic charge All monitors

plus quote P.O.A.

WTS Electronics Ltd reserve the right to refuse machines that in their opinion are beyond reasonable repair. Full charge applies.

Tel: 0582 491949 (4 lines) WTS Electronics Ltd, Chaul End Lane, Luton, Beds LU4 8EZ

SafeSoft Disc Archiver

Save time, space, and money with SafeSoft's first product in the CPC market.

Have you got a 3.5" disc drive? If you have, the odds are you've got some software that only runs from the A drive. Or maybe you run a PD library, and arrange your disc collections by disc sides? Whatever the weather, we may have found a utility to suit your needs, in the way of the SafeSoft Disc Archiver.

This is probably the first package of its kind ever seer on the CPC (or any other machine come to timik of it), though it evolved from a very well known idea. For years now, you've been able to get hold of programs that create an image of a disc and save it out to tape. The philosophy behind this was that as discs cost around £3, and tapes cost 50p to £1, you could save money by storing discs that you didn't use all that often, wiping the disc, and using it for something else, retrieving the image from tape when the programs were next needed.

So what we've just received is along those lines, only it can archive sides of 3" discs onto a 3.5" disc, fitting (at a minimum) four 3" disc sides onto one high density (800k) 3.5" disc. So what's the advantage? Well, there are three:

- Faster storage and retrieval. Obviously, if you're archiving with tape, it'll take about ten minutes, whereas using a disc is a matter of retrieving a whole side in under a minute.
- Less errors. The other large advantage is that whereas using a tape means rewinding and fast forwarding around several read errors, information on disc is a lot less difficult, and a lot less easy to damage.
- Cheaper medium. OK A blank tape large enough to archive two sides of a 3" disc will set you back around £1. A blank 3.5" disc large

Compression

Though the claim to fame may be to store four sides on a 3" disc onto one 3.5" disc, due to the inbuilt compression system, the package actually managed to fit the test disc into a 140k, as opposed to 180k. This is not a uniform compression rate, the package just tries to crunch the data length where it can. All the same, it's a pretty nifty little addition.



Lots and lots of lovely onscreen help to get you started without reference to a manual.

enough to archive four sides of a 3" disc will cost around 50p (if you know where to look), or at most £1. This means that storage rates have doubled for the same price, or maybe even quadrupled.

Anyway – enough of singing the praises of using such a package, and it's about time we took a look at the software itself. When you first load the package, you're presented with a main menu, from which you can select to catalogue discs (in both A and B drives), and compress/retrieve discs. So after a little mucking about, I found a reasonably chunky disc to compress, and got on with it.

When the thing starts archiving your disc, there's not really much to say. You're asked for a filename, and it just whirrs a little, and starts archiving. You can see a track counter to let you know how far through the disc you are, and then, lo and behold, there's a file on your 3.5" disc! That was easy enough!

Of course, the true test comes when retrieving the disc. So I found a blank disc, and



And lots and lots more onscreen help while you're storing your precious information.

Be Careful

A word of warning – in order to run this package, you will already need a high capacity disc system, such as ROMDOS, MS800, S/DOS, etc.

set to work de-archiving. The first thing that happened was the program worked out it didn't like the disc – it was the wrong format (I was trying to write a DATA format image on to a SYSTEM format disc. I was asked whether I wanted to re-format the disc, to which I gave a hearty yelp, and pressed Y. The program then showed me a track counter, and recreated the disc I had archived.

disc I had archived.

As a package, it works. It's as simple as that. It does the job it set out to do. So I you feel you've got a need for the SafeSoft Disc Archiver (and I think quite a few people will have), rush out and buy it, as it really will come in handy.



Contact

If you want to get your sweaty little mitts on this absolutely marvellous package, all you have to do is send £9.95 in the form of a cheque or postal order to the boys at SafeSoft. If they do get a good response by the way, there'll be some more goodies soon – watch this space!

Safesoft, PO Box 87, Patchway, Bristol BS12 8BW.



Reception halls full of people gather around candlelit tables as Simon dons his tuxedo, and shuffles a pile of silver envelopes... The Sugar awards are about to begin.

Over the years **AA** has reviewed a lot of games, serious utilities, and hardware. You've read a lot of people giving a lot of opinions on a lot of stuff.

It's time to sort it all out. So now, live from Hollywood, we bring you The Sugars. After inonths of painstaking work, a panel of **AA** staff old and new have decided on the best products ever to grace the central processors of the CPC.

The ceremony is split into three categories – hardware, games, and serious software. So now over to your host, Simon Forrester:

Hello and welcome, Ladies and Gentlemen.
Please sit back and relax as we present... The
Sugars. Let me explain the format of this most
prestigious of award ceremonies:

Hardware is rated on several criteria. We

look at quality and the way the box (or whatever) is put together. We also rate for innovation, usefulness and price.

Of course, we also test individual factors, such as speed and reliability for disc drives, speed, quality and noise for printers, wearability for joysticks, ease of use for ROMboxes, etc.

For **Serious Software**, the rating system is much like the hardware section, only more strict. The main factors tested are versatility, speed, power, ability, price, and reliability.

How else to rate **Games**, than in the good old **AA** way. We mark graphics, sonics, grab factor, and staying power. We'll also be looking at innovation, pricing, and overall impressions.

But let's get on with it...

FEATURE

Hardware

Welcome to the first part of tonight's show, the section that sees the most expensive precision work, and some of the most sought-after products. We're talking about hardware.

And so on with the awards, and our celebrity presenter, Michelle Pfeiffer, Unfortunately, Michelle can't be with us tonight, so Simon Forrester will be doing the honours for her.

The nominations for this category were the Quickshot series (for doggedly refusing to stop designing joysticks), the Competition Pro range (for their sheer quantity of colour combinations), and the Konix Speedking (for its design).

Probably the one joystick that is closer to perfection than most is the stick that is designed to fit beautifully into the hand (be it left or right), with easily accessible fire buttons, good quality microswitches, and above all, durability. And when we say durability, we mean it.

You guessed it, the Konix Speedking is probably the best joystick available, which is why we're proud to present it with the Sugar award for 'Joystick Excellence'. Congratulations Konix.

Black Boxes

Black boxes are widgets that plug into the back of your machine, and allow you to freeze the action at any time so you can examine the contents of memory and do stuff to it. The nominations were as follows: Hacklt (for its programming facilities), Mirage Imager (for its simplicity and uncomplicated approach), and the Multiface 2 (for its hacking capabilities).

This is a very difficult decision and in the end, a joint award had to be given.

First, congratulations to Romantic Robot, who receive one half for their Multiface 2, which has pushed back the boundaries of games hacking/poking for many CPC users. Its capabilities are proved time and again, as fewer and fewer protection systems manage to defend themselves against its brute hacking strength.

The other half of this award must go to Siren Software, for their innovative Hacklt box. The ability to freeze memory and work on it with an advanced set of programming tools has proved to be an invaluable aid to machine coders.

So it is with great honour that we award both Siren Software and Romantic Robot with the Sugar award for 'Sneaky Stuff'.

The arrival of the 3.5" drive onto the CPC scene was, to say the least, refreshing. The facility of saving more than 360k on a disc saved quite a lot of people's money, as 800k for 50p seemed far better than 360k for £3.

It's possible to attach just about any drive to your CPC, but there were several companies who marketed 3" drives to CPC users. These had the advantage of being guaranteed to be compatible, and coming with the correct leads, etc.

Of course, there were also those companies that provided extra boxes, allowing the 3.5" drive

to be used as a DDI-1, and allowing users to actually utilize the whole 800k (normally the CPC only accesses 180k of any disc).

And so picking the best 3.5" drive supplier was difficult. But there was one company that stood out among the others for their prices, the drive's manufacture, and the bundle it came with. And so congratulations to Siren Software, who win the Sugar award for 'Hard Driving'.

Printer, eh? The only device with the in-built feature of being impossible to get working properly on your CPC the first time round. This is fact. When a salesman sells you a printer, they automatically set a spare one aside, so they can help you quickly when you bring it right on back. So how do we qualify a strange beast such as this? Well, if you ever do get one working, it'll be an invaluable aid

What makes a good printer? Well, there are several things to consider:

- Pin quantity Most printers are 9-pin, but the more pins, the higher resolution of your printout (in text mode).
- DPI Dots per inch means, well, exactly what it says A printer that can fit more dots into one inch can give you a higher resolution graphics printout.
- CPS Characters per second is the standard measurement form for a printer's speed.

And so we've given the award to a printer with speed efficiency, low power consumption and high resolution. The printer we finally chose can be plugged into a CPC very easily, and has a good, clear, and concise manual, containing all the information you need on dip switching, etc.

Congratulations Star - we love your LC20. Have an award – the Sugar 'Into Print' award.

Here's where things get really difficult. For a full explanation of exactly how a ROMboard works, you can refer back to issue 92 (or buy it if you haven't already got it - see page 30).

Now... To rate a ROMbox properly, we have to look at several features:

- ROM insertion How easy is it to manoeuvre those small, fragile, and unfeasibly delicate pins into the sockets. Some boards have ZIF sockets (zero insertion force), but these never really seemed to take off for the CPC.
- Expansion sockets There's nothing worse than having a ROMboard on the back of your machine, full of ROM software, only to find that you can't put anything else on the back, because of the total lack of a through port.

Sturdiness – When you add a ROMboard to your CPC, it has to be sturdy. Some fragile little piece of PCB is going to snap as soon as you move your CPC around. Free standing modules always come top in this area, as they don't place all their weight on that ball crunchingly fragile PCB edge connector of the standard CPC.

Switching – There are times (such as running many games) when you need to lose the board completely. Here, you have two choices. You can either unplug it, or switch it off. If you don't have a switch, you're destined to plug and unplug your ROMboard until the connector refuses to work at

also nice to be able to turn off individual ROMs. as

some may interfere with others. So, after that mammoth set of

gripes that should have set every board manufacturer's teeth on edge, we'll cut straight to the winners. The first winner of this joint award, the Sugar 'When In ROM Trophy', is Rombo, for their board, imaginatively titled 'Rombo'. The board, though falling down in the 'ease of insertion' stakes, has a lovely long lead, through expansion ports, and some easily accessible dip switches.

The second half of the award must go to Siren Software for their ROMboard, called 'ROMboard'. It's not got as long a lead as the Rombo board, but has the through port, easily accessible dip switches, and comes in a sturdy little box. Unlike the Rombo board (which carries

may I welcome to the stand our presenter for the Sugar games awards, Keanu Reeves. Unfortunately Keanu can't be with us tonight, so the awards will be presented by that other international star, Simon Forrester. The awards are presented in alphabetical order, as no preference is shown

is easily enough. The Siren board does have one

advantage over Rombo though - when you open

the box to insert ROMs, the whole circuit board

comes free, so you can insert stuff very easily.

Games

The games awards have been arranged slightly

differently to the other two categories. In this

categories - instead, we have ten Sugars to

award the ten most innovative, entertaining,

original, and well presented games in

CPC history. So

without

further

ado.

section, we do not have several separate

Why Bloodwych? Well, when it first arrived on the CPC, it was the first 3D role playing romp-'em-up. Sure, there'd been many other 3D dungeon games even in the very early arcades, but Bloodwych was different. It had you controlling a

8 ROMs), the Siren board only carries six, but six party of four people, be they wizards, warriors, thieves, or clerics. Each player had separate statistics, could carry objects, use spells, etc, using the wonderful icon system.

> On top of that, the dungeon was large, with various obstacles, bad guys, weapons to collect and use, rune stones, and much, much more.

For the first game to have used this system on the CPC (and many other machines, under the guise of Dungeon Master), they'd got it perfect.

And so for innovation, care, thoughtfulness, challenge, fun, and intrigue, Bloodwych most definitely gets one of the coveted Sugars.

We've all played scrolling platform games. We've all romped around jumping over huge drops, collecting goodies, entering sub levels, etc. Builderland is different. Instead of controlling a blokey that runs around, you control the landscape. Weird, huh?

You see, with Builderland, the blokey is totally stupid. All he does is walk to the right. That's it. Your job is to shuffle various moveable blocks (with a Puzznic-style movement system), to

> bridge these gaps, and allow said bloke to reach the end of the level.

> > springs, lifts, ramps, clouds, pots, mines, and much, much, more. You could get the bloke to pick up various other useful things, such as magic shoes (I'll get you, my pretties!) which allow the bloke to stroll happily over mines, false floors, etc, without setting them off. Actually, they're probably just a pair of slippers, but nonetheless, they do the trick.

So, for the weirdest angle on a computer game, combined with addictive and manic gameplay, Builderland gets the Sugar easily.

Chuckie Egg

Chuckie Egg, eh? It's old. Very old. The format is simple – a single screen platform game, in which you must collect all the eggs (playing Hen House Harry), and avoid the geese. It only had eight levels, that cycled after you'd completed them, gradually adding more geese, huge rubber ducks, and the like.

So why does it get a Sugar? Well, after Manic Miner, it's probably the first platform game of this style to hit the CPC. It's also the best. It took some elements of Manic Miner, sped them up, and actually ended up as a game that was fun.

The odds are, you'd never find it these days the company who originally carried it, A'n'F, vanished without a trace. But if you do come across it, snatch it, as you won't get many opportunities like that one.

What more can I say? Chuckie Egg, you get the Sugar. Polish it regularly.

The problem with most computer games is that they are incredibly restrictive when you think

about it. There are many ways of solving the same problem, and with most games, you have to not only devise a strategy, but hope and pray that it's the same strategy the programmer wanted you to think of.

This isn't a problem with simple platform games, etc. but with larger, more adventury style stuff, it's a major set back. As you've probably guessed by now, Elite breaks the mould.

As a 3D vector space game, it's one of the best, with radar, various other types of ship, planets, space stations, invading forces, etc. Each ship you will come up against has different flying techniques, speeds, handling, etc. You don't get consciously plonked in front of them one by one by the way, you'll just meet them while you're flying around, and trading.

That's the other aspect of the game – trading. Each planet has a space station where you can dock, buy fuel, extra weaponry, and 'stuff'. By 'stuff' I mean anything from a large array of food, material, metals, machinery, etc, that the planet produces. Each planet has different prices for 'stuff', so the point is to fly around buying things cheap, and selling them on planets that pay a slightly higher price.

Alternatively, of course, you could just attack As well as blocks, there are other traders, and steal their cargo (from the wreckage that you turn their ship into with a healthy dose of laser), and sell that. No overheads, you see,

> Failing that, you could become a bounty hunter, and blow away renegade ships, getting cash rewards for every bad guy you waste (if you waste a good guy, you just get a criminal record). On the other hand, (if you're a hyperevolved alien-type and you actually have this many hands) you could buy a mining laser, and mine asteroids for a living.

You see, that's the the beauty of Elite. At no point do you ever have to say what you're doing - you just do it, and get on with the game. As far as flexible game environments go, Elite has to be one of the best. It's also a damned good space flight sim. Sugar? We think so.

Guild Of Thieves

Okay, okay, I'll put an adventure game in. Well, it would have gone in anyway, really. You see, when it comes to adventure games, get Guild Of Thieves. It's fab in a majorly fab way.

Adventure games have three main aspects plot, style, and interaction:

Plotwise GOT is good. Your reasons for actually being there are strong - to join the Guild Of Thieves. There's none of this 'journey through the magical land' or 'do the laundry' nonsense.

As for style, well... There are some absolutely wonderful graphic screens (with beautifully drawn pictures of locations), humorous descriptions (and a few humorous exchanges), with a written style that is perfect for the game. Everybody has sensible names, and every castle has several bedrooms, a bathroom, and several sitting rooms. That's the way a castle should be.

As far as interaction goes, the parser is impeccable. It understands multiple requests (such as 'Open the bag and put the coin into it'), and therefore hardly ever gets stuck on ->

FEATURE

what you're asking it to do. Every object has a description, whether it can be moved or not, and every room has a lot to look at, and do.

If you're just getting into adventures, this is the game to take a look at, and if you're already a hardened dragon slayer, you'll appreciate it (though it doesn't have any mystical beasts). Definitely a Sugar.

Prehistorik II

If you want an explanation of why P2 gets a Sugar, just read the review this ish. 'Nuff said.

Prince Of Persia

As I said earlier, we've all played platform games. that. Anyway, Rick can run, jump, crouch, crawl, So what's so special about this one? Well, you're rescuing a girl (which is nothing new), slicing a fair few bad guys (old hat), and avoiding deadly drops (yawn). If this came in for review, I'd probably blow it clean away, were it not for the fact that it's incredible.

The bloke you play is not just your average pixelized guy with no hands. He's human! When you just miss a platform, you can make a grab for it, and clamber up to safety! You can climb down the edges of platforms, swing dangerously from ledges, and pretty much do everything you vourself could do in that situation.

This extra depth in gameplay makes what would have been just another yawn-'em-up a wonderfully challenging game. You really empathise with the prince when he catches a spike right in the groin, of missed a ledge after making a desperate grab for it - far more than if he'd have just fallen to his death with a stupid

sounding

grin on his face.

It's definitely Sugar material.

Rick Dangerous is basically an ordinary bloke. However, when aliens land in Hyde Park, he feels compelled to penetrate their defenses, and defeat the invading alien nation. I know I would.

For someone who is fundamentally rectangular in shape, Rick sure manages to do quite a bit. He's got mines, walking mines, and a laser gun. That's it. With this, he hopes to defeat a force of deadly extra terrestrials.

Oh yeah, it's a platform game. Sorry about and do loads of lovely stuff along those lines, but apart from that, it's just a very simple platform arcade adventure. What's so special about it then? Well, it's fun. Simple as that. There's a wide range of meanies out there, from wall mounted laser cannons, through boulders, all the way to snowball machines.

Quite simply, if this game doesn't keep you intrigued for quite a while, I'd be very surprised.

As with Prehistorik II, just check out the review (last ish) to find out why it's included here.

Yeah yeah yeah, I know there's been several 'improvements' on the original, in the form of Power Tetris, Super Tetris, 3D Tetris, Welltris, etc, but you can't beat the original. The whole point of Tetris is its simplicity of concept, and no-

frills addiction. This does lead me to ask why, for a game which was based on simplicity and noncommerciality, did a pop group see fit to climb the charts with a cover version of the theme tune? This kind of thing worries me. I'm just thankful it wasn't Kylie. Keep an eve out for the film of Tetris, staring Hulk Hogan and Macaulay Wotsitsname – it should have been written by now. Failing that, go out and buy the hooded top.

Sorry about that, I got carried away. Anyway, congratulations Russia, for producing Tetris.

Serious

Ladies and gentlemen, for the final part of tonight's proceedings, may we have a warm hand for Jodie Foster. Unfortunately, Miss Foster couldn't be with us tonight, and so we must hand over to AA's very own Simon Forrester.

Ask any machine code programmer. They'll all tell you the same thing. If you want to code, you really should get a Firmware Guide. This is simply a book that gives full details on every single jumpblock entry, etc. Put more simply, it is a complete documentation of everything the CPC can do, and exactly how to do it.

These were originally sold by Amstrad, but are no longer in print. This is unfortunate, as they're now like gold dust, so if you can possibly find someone selling a copy, expect to pay around 20 quid. Believe me, it really is worth it.

And so for unfaltering service to machine code programmers everywhere, the Firmware Guide (Soft 968) wins the Sugar award for 'Huge Black Books Full Of Technical Stuff'.

When you're machine code programming (with or without a firmware guide), you'll need an assembler. This is a program that converts your text program into the series of numbers that the CPC interprets and acts on.

There are many different assemblers around but none really comes close to the winner of this award. The winner is, of course, Maxam. For an assembler, Maxam is, to say the least, advanced. It contains breakpoint features, a full text editor. a memory editor, a disassembler, etc., etc.

What more can be said? When it comes to assemblers. Maxam is the one to own (on tape, disc, or even ROM). Arnor should be jumping around hugging each other when they find out they've won the Sugar award for 'Technical Programs That Most People Can't Understand'.

Disc Utilities

You've got a 6128, a 664, or a 464 with a disc drive. You've also got a packet of discs. Some are 3.5" and some are normal 3". But maybe you want to do just a little more than saving and loading files. You might want to unerase files, format discs, verify disc formats, set files to read only, hide them from the directory, format a 3.5" disc to a high density format, etc etc.

This, as you've probably realized, is $\rightarrow p18$



For Sale

AMSTRAD CPC 6128 + colour monitor over 30 games, 40 magazines (AA, ACU + CPC Attack). Also 3D kit, Mini Office II. Cruiser joystick. Quick sale, England only - £250. Ring Karl 0533 601687 Leics.

CPC 6128 Colour monitor, Multiface II, Midi Interface (EMR), £100's of software inc. advanced Music System, advanced Art Studio, Tasword, Supercalc, mouse, 2 joysticks, tape deck £250. John 0462 454780.

AMSTRAD CPC 6128 with DMP 2000 printer, 2 disk drives, tape leads, light pen, mouse, joysticks, monitors, paper, magazines, 80 disks, 100's of games; also Soundblaster Amplifier with speak Multiface II. Ring Keir 081 392

SMALL BIRD CARTOON includes birds singing, flying and pecking. Amstrad CPC only. Please send tape/disk and £1.30 to Martin Lester, 79 Culverden Park, Tunbridge Wells, Kent TN4 9QS. SOFT 968 - THE firmware manual. Yes

at last all of it in original box with new inserts - complete book. Very good condition. A must for programmers. £25 p+p inc. **Tel Tom 0626 335991.**

inc. Tel Tom 6626 335991.

CPC 464 mono monitor, TV modulator,
JY1 joystick, EASI, Amsword,manuals, 6
AA's, 70+ games including - Cartoon
Collection, Heroquest with Witchlord,
Expansion, Operation Thunderbolt and
more. £150. Phone 0895 440379

AMSTRAD CPC 464, green screen monitor, numerous AA cover-tapes, includes manual, joystick, many games, with classics like Sim City and Dizzy, etc. Only Tel 0372 374243 (Leatherhead).

CPC 464 colour monitor, joystick, dust covers, handbook, 10 manuals, 16 magazines around £500 of software. Cost £900 will sell for £230! Phone Andrew 0592 757044 after 6pm (Fife).

AMSTRAD CPC 464 for sale, 90+ games, good condition, manual provided.
All offers considered. Phone Tom 0379 651530

CPC 6128 with colour monitor, joystick and many games (tape & disk). Also tape player and user manual for £300 ono. Edward Fitzpatrick, Trench Bridge Farm, Ellesmere, Shropshire SY12 9DS AMSTRAD 464 with monitor, TV modulator, joystick, games, Mini Office II, user manual, excellent condition. £180 ono. Upgrading reason for sale. Tel Steve on 061 494 5064 after 6pm

AMSTRAD CPC 464 with colour monitor, synthesis, stereo speakers, graphics, lightpen, 50 plus games, joystick user magazines £225 ono. Phone Gary 081

AMSTRAD CTM 644 colour monitor. GWO for 464/6128 or with cable adaptor (Amiga, ST/E, Coupe, Spectrum 128 models) includes Television tuner £90 including postage, Martin, 32 Grass AMSTRAD CPC 464 computer with Multiface and colour monitor. Also lots of games plus Amstrad Action issues 79-87; £110 for the lot. Tel **0624 842343** and

AMSTRAD CPC 464+ with colour monitor approx 50+ games. AA mags, 24 copies 91-92. £180 ono. Also MP2 modulator £15. Sell separate or both £190. Tel 0787 375495 after 6pm.

TAPE GAMES over 60 games including Rainbow Islander, Robocop, Arkanoid I & Il etc, plus Compilations. Also AA cover Accept £70 ono. tapes. Accept £70 ono. Gordon MacFarlane, 12 Hillvlew Terrace, Ardrishaig, Argyll PA30 8EL. 40 GAMES for sale, all £3 each. Games include Castle Master, Lemmings, Sim

City, WWF and many more. For list ring Keith on 0602 282990 after 4pm.

AMSTRAD 6128 with colour monitor, 70

disk games including Lemmings, Super Off Road, lots of compilations, Mini Office 2. Colossus 4 Chess, educational packs and manual £280 ono. Phone 0994 448315 for John.

464 DISK DRIVE, Multiface 2, AA62-85, ACUs, over 150 tape games: Chart Attack, Heroquest, Dizzy games, Ace, F16, Wec Le Mans. Send SAE for list. Everything £220 or I'll split it. Tel 0773 863242 (6-9pm).

CPC 6128 colour monitor, DMP 2000 printer, joystick, lightpen, games, manuals, magazines, serious: Mini Office 2, Devpac, Forth £125. Phone 081 459

CPC 464 colour monitor, disk drive, some games, joystick, all manuals, hardly used, all excellent condition, boxed last couple years, very reluctant sale, real bargain

AMSTRAD 6128 with cruiser power play. joystick, tape player, 36 tape-games including WWF, Streetfighter, 41 diskgames including Golden Axe Robocop £190 ono. Phone Ross 0271 883834 N.

AMSTRAD 6128 colour and mono monitor, TV tuner, 5.25 extra drive. Multiface 2. 100's of games, serious software, magazines £185. Tel 0508 495397 (near

ATLAST PLUS DATABASE and Cashmaster Accounts for CPC 6128. £10 each, £15 for both, post paid UK. Tel 0582 663782 ask for John Senior. CPC 464 for sale. Lots of games titles, include 3D Boxing , 3D construction kit, Paperboy, joystick. All in working order £200. Tel Armitage 0543 490236. GAMES for sale for the 464. They include Stunt Car Racer, Hard Driven Out

include Stunt Car Racer, Hard Driven Ou

Run etc. For a full list send SAE to Kevin Williams, 120 Brickhill Road, Wellingborough, Northants NN8 3JP CPC464 Computer with DDI1 disk drive and interface. Loads of software, books and magazines. £279. Printer also available Phone 051 652 5676 Wirral.

CPC6128 Green, DMP4000 printer, 5 joy-sticks, Genius Mouse, Multiface, tape recorder, business disks, over 190 games. CPC Attack + AA magazines.Cos over £1,000 complete system, accept £750. Phone Carl 0244 544498. No

AMSTRAD CPC 6128 computer with instruction manual, 2 joysticks, 39 games on disk and 25 game on tape. complete with TV Modulator and Cassette lead. Excellent condition £100. 081 397 2305 (Chessington)

AMSTRAD CPC464, keyboard, green screen, modulator, disk drive, printer paper, joystick, manuals, 100+ games and utilities on disk, AA tapes 2-25 including Tasword, Powerpage £280 ono. Exeter 0392 876356.

CPC6128 GREEN MONITOR, plus

colour, needs attention. Tape deck most AA's and tapes, over £300 games tapes and disks plus blank disks, leads £200 ovno. Tel 0268 556646

64K MEMORY EXPANSION and 64K Silicon disk with manuals £35, Multiface 2 with manual £20, Amstrad Action no's 64 to 86 in hinders £20. Phone Brl on 0425

477229 (Hampshire) 6128 WITH COLOUR MONITOR Cassette player, Hackit joystick, lots of software both games and serious. £250 ono. Tel 0636 610704.

AMSTRAD CPC464 cassette games from £2, Total Recall, Star Wars, Super Off Road 1943, Afterburner, Paperboy, Batman loads more to choose from Tel Luton 0582 581259.

all the last of	A CONTRACTOR OF THE CONTRACTOR
	""" " William
A A	
	O. S.
	Evaluation Copy For a state of the state of
	20
POSSI	
PREHISTORIX 2	
CAULORON ASSESSO DISC	
Greative AD	ACTION

London). Hoyai, Yeovi	BAZ1 45W.			
ORDER FORM SI	END TO AA SMALL ADS, AD PRO	DUCTION, FUTURE PUBLISHIN	G LTD, BEAUFORD COURT, 30 MONM	IOUTH STREET, BATH, AVON BA1 2B'
Please place the following	ng advertisement i	in the next availal	ble issue of Amstrad	Action
Name		-	FREE	
Address		It's true in Amst part of c	READER A - from now on your continuing efforth with the best values possible.	ou can advertise OTHING! It's all Forts to provide
Classification. Tick box:	Wanted	Services	User Groups	Other
				0
Write your advertisement here, one v	word per box. Include	e your name and ph	one number if you wan	t them printed.

where Maxidos comes in. You get a command line, with the various functions executed by way of a simple command. This, granted, is a little more difficult to use than a structure of menus. but as far as error trapping (how idiot proof the package is). Maxidos is second to none.

As a further incentive, the package includes a sector editor (for close and delicate disc operations) and an optimizer. An optimizer is a fab little program that takes files and simply rearranges them. You see, after a while, because discs have so many files erased, saved, etc. the file is not one solid chunk of data, but several parts on various points of the disc. This slows down disc accessing, as the read head of the drive has to jump all over the place to actually read the disc. An optimizer, then, rearranges the disc so that all the files are sitting in large blocks, speeding the whole thing up immensely.

So, instead of going out and buying several disc utilities to take care of your disc operations, why not just Maxidos? We've given it the Sugar award for 'Far Too Useful Disc Utilities'.

Before we start here. I think we should mention that this award is actually entitled the Sugar Award for Mini Office 2. Why? Well, it's not a category, you see. The logic behind this is as follows – here is a package that combines a spreadsheet, a database, a word processor, and a communications package, as well as a numerical graphics (pie charts, bar charts, etc). So why shouldn't we give such an outstanding package a reward all of its very own? Put quite simply, if you're a part time serious user, MO2 is something you really should consider shelling out for – it contains pretty much everything you're really likely to need for most applications.

Congratulations, Database/Europress

If you think about it, one of the most difficult things to get a computer to do is artwork. Whereas with a pencil you can create any shape you want, a piece of computer artwork has to be built up of dots and lines.

This is where a good art package really comes in handy at times. You see, most shapes are only possible in an art package because the program has facilities for that shape. Imagine trying to draw a large circle without a circle option. How the heck would you do it? Sure, it's possible in BASIC, but that's no use to you when you're in an art package!

I guess what I'm trying to say is that for an art package to really leave a mark, it has to be really comprehensive. That's why I opted for OCP Art Studio. OCP has probably the largest range of drawing tools ever to grace the CPC. along with ink protection facilities, cut and paste. transparent, OR, AND, XOR, and opaque modes, palette switching, and pretty much everything else you'll ever need to produce some of the finest screens your CPC

Of course, you'll always need a bit of artistic skill, but with a package like this, that should be the least of your worries.



Unlike an art package, a desktop publishing package has to have good text handling facilities and an ability to work on A4 paper. This is because when you are producing a fanzine, newsletter, or information sheet, you'll want to be able to produce large amounts of text on a WP package, and import it onto the page. The alternative is typing everything with a dodgy text function on an art package - no fun.

The answer, then, is to use a DTP package instead of an art package. But which one? Well, there have been two main contenders in the field PowerPage, and Stop Press.

Stop Press was the work of Advanced Memory Systems, creators of the AMX Mouse, and its accompanying art packages. The package itself is rather strange. You see, though it has a mouse bundled with it, you do have the problem of needing the Stop Press disc for the CPC to access every time you select a menu option. This, as you can imagine, is a bit of a heavy downer. You see, you can only store two pages per side of a 3" disc. You won't find many packages that get a better storage size than this, but it does mean that you cannot store pages on your Stop Press disc itself, meaning huge amounts of disc swapping.

And so in steps PowerPage. Its claim to fame is that it does everything Stop Press does, but with two main differences. First, the whole package sits in memory at once (no disc swapping at all) and secondly, it's free! That's right, PowerPage is totally PD! And so the Sugar 'Cheap, Cheerful, and Surprisingly Powerful' award goes to Richard Fairhurst of Robot PD.

For a word processor to be in the least bit useful. it has to be fast, flexible, comprehensive, and easy to use. I think we can safely say, then, that Protext has got the lot.

Unlike other WP packages, Protext works from a command line. This means that instead of selecting what you wish to do from a series of menus, you simply type a command (a bit like BASIC, really). Of course, it works as a normal WP when typing, with a normal editing mode, but with the command line format, it means you can process documents much easier. For instance, when printing, instead of going through several menus, you simply hit 'P'. To set up printer controls, there's an entirely separate command.

As a text editor, Protext is good as well. It supports user-definable control codes (for printers), hard spacing, justifications, word wraps, different rulers, international characters, block operations (copy, move, delete, load, save), and just about anything else you need.

So Arnor get the Sugar award for 'How Many Things Can We Pack Into A Word Processor?'

Over the last few issues, there has been dispute over just which is the best high capacity package around. It's been a close run battle between SDOS and Siren Software's upgrade to the original ROMDOS, now called ROMDOS XL. Due to bugs in the released version of ROMDOS XL though, SDOS did scoop a fair amount of sales

However, ROMDOS XL has just been rereleased, totally bug free, and just scoops the prize as the definitive DOS package, with built in copiers, directory editors and stuff, which just about bring it far enough forward to take the Sugar award for 'DOSsing Around'.

Soundtrackors

If you want to know about why Soundtrakker wins the 'Just A Ouick Note' award, check out AA92.

Oh, we couldn't possibly... Yes we could... I'd just like to thank the whole team, all the readers...

THE UK'S No1 AMIGA SPECIALISTS AMIGA 500 PLUS SOFTWARE PACK - FROM SILICA AVE £100! ZOOL is the software pack of the year. It includes: Zool, Transwrite, Pinball Dreams and Striker - Value £127.92. All Amigas from Silica (excluding A600 Standalone and Amiga 4000) include a FREE ZOOL pack as well as GFA Basic and Photon Paint II Platform Title of the year - 97% Amiga Comp - Nov '92 TRANSWRITE £49.95 PINBALL DREAMS £25.99 STRIKER £25.99 **ZOOL PACK: £127.92** VEAR RETURN TO SILICA WARRAN GFA BASIC v3.5. £50.00

PHOTON PAINT II. £89.9 TOTAL VALUE: £267.87

1 Mb RAM

AMIGA 1200 AMIGA 1200



14.19MHz Clock Speed 32-hit Architectur JII T-IN 1M DRIVE & TV MODULATOR 2Mb Chip RAM ME HARD DISK .

£29.9 OME - ROLE PLAYING ADVENTURE £25.9 YTH - STOP THE SPREAD OF EVIL \$19.9 IVIAL PURSUIT - POPULAR QUIZ .. £29.9

AMIGA 600HD

1 x 32-Bit CPU/RAM Expansion Slo FROM SILICA (See Top Left) £267.8 PCMCIA Smart Card Slot takes 512K. 1Mb or 4Mb PC Cards

SILICA PRICE: £299.0 20_M 40_M

2½" Internal IDE Hard Dri 1 Year On-site Warranty FREE GIFTS FROM SILICA (S

AA Chin Set for Enhanced Graphics

256,000 Colours on Screen

+ HARD DISK

re legal upgrades approved be commodore. Both the A120 nd Hard Disk are fully covere

2 HAM 209 HD

AMIGA 1500



YEAR RETURN TO SUICA WARRANT

REE FROM SILICA (See Top Left)

ACK INCLUDES

1Mb AMIGA 500PLUS .

A520 TV MODULATOR

FREE FROM SILICA (See Top Le

BUILT-IN 1Mb DRIVE

CAPTAIN PLANET

vith your choice of hard disk 35мь, 127мь or 209мь). Thes NEW! AA CHIPSET

SILICA PRICE: £399.0 1 Mb RAM

AMIGA 600

1Mb AMIGA 600 ... BUILT-IN TV MODULATOR. TOTAL PACK VALUE: £724.82 LESS PACK SAVING: £525.82

TOTAL PACK VALUE: £289.94 LESS PACK SAVING: £90.94 SILICA PRICE: £199.00

AMIGA 4000

MONITOR

In AMIGA 600 BUILT-IN 1Mb DRIVE .

AMIGA 600

FROM SILICA SYSTEMS

BUILT-IN TV MODULATOR DELUXE PAINT III TOTAL PACK VALUE: £573.8 LESS PACK SAVING: £344.8

AMIGA

4 MAM 80 MB

6 MAM 120 MB

6 MAM 214 MB

6 PAM 245 10 1

6 MAM 340 MB

6 RAM 540 10 Sam

6_{8...} 80 #

6 MAM 120 MB

6 KAM 214 HD

6 RAM 245 HB

6 mm 340 mm

6 FAM 540 5 £2

25мнг 68040

SILICA PRICE: £229.0



AMIGA 600



BUILT-IN 1No DRIVE & TV MODULATOR DELLIYE PAINT III 679 90 SILLY PUTTY REE FROM SILICA (See Top Left) £267.8

TOTAL PACK VALUE: £634.82 LESS PACK SAVING: £405.82 SILICA PRICE: £229.00

Mb RAM

PLUS! FREE FROM SILICA Amiga Vision, Photon Paint II & GFA Bas 25MHz 68030EC anster time 153Kb/second moatible with CD + G and CD + MIDI forma

CDTV

IDCDADES & REDAIRS

CALL FOR A PRICE LIST

RAM UPGRADES
FOR THE AMIGA 4000

4Mb to 6Mb: 2 x 1Mb @ £35 per Mb = £70
6Mb to 10Mb: 1 x 4Mb @ £30 per Mb = £120
10Mb to 14Mb: 1 x 4Mb @ 30 per Mb = £120
14Mb to 18Mb: 1 x 4Mb @ 30 per Mb = £120

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

SILICA SYSTEMS - THE AMIGA SPECIALISTS

efore you decide when to buy your new Amiga computer, we uggest you think very carefully about WHERE you buy it. Consider hat it will be like a few months after buying your Amiga, when you you require additional peripherals or software, or help and advice tilt your new purchase. And, will the company you buy from contact ou with details of new products? At Silica Systems, we ensure that ou will have nothing to worry about. We have been established for most 14 years, we are Amiga specialists and are a Commodore pproved dealer. With our unrivalled experience and expertise, we an now claim to meet our customers' requirements with an inderstanding which is second to none. But don't just take our word or it. Compilete and return the coupon now for our latest FREE it. Complete and return the coupon now for our latest FREE erature and begin to experience the "Silica Systems Service".

COMMODORE APPROVED UPGRADES:
 Official Hard Drive upgrades with WANG on-site warranty.
 FREE OVERNIGHT DELIVERY:
 On all hardware orders shipped in the UK mainland.

TECHNICAL SUPPORT HELPLINE:

• PRICE MATCH:

We match competitors on a "Same product - Same price" basis. ESTABLISHED 14 YEARS: We have a proven track record in professional computer sales • £12 MILLION TURNOVER (with 60 staff):
We are solid, reliable and profitable.

BUSINESS + EDUCATION + GOVERNMENT:
 Volume discounts are available. Tel: 081-308 0888.

 SHOWROOMS:

We have demonstration and training facilities at all our stores. • THE FULL STOCK RANGE: ents are available from one suppli

• FREE CATALOGUES: Will be mailed to you, with special reduced price Amiga offer as well as details on all Amiga software and peripheral

PAYMENT: We accept most major credit cards, cash, cheque or month.



1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-309 1111
Non-Sat 9.00am-6.00pm Fax No: 081-309 0608 Order Lines Open: Mon-Set 9.30am-6.00pm

LONDON SHOP:
Opening Hours: Mon-Set 9.30am-6.00pm

LONDON SHOP:
Onening Hours: Mon-Set 9.30am-7.00pm 52 Tottenham Court Road, London, W1P 0BA Tel: 071-580 4000 SIDCUP SHOP: ESSEX SHOP:

Opening Hours:	Mon-Fri 1	0.00am-5.30pm	(Sat 9.00am-6.00	Opm) La	ate Night: Thu	irsday - 7pm	Fa	IX No: 0702 468
To: Silica Sy								
PLEASE	SENI	D A 6	4 PAGI	AMI	GA CC	DLOUI	R CATA	LOGU
Mr/Mrs/Miss/	Ms:	Initials:		Surname:				
Company N								
Address:								
71441000111111								
	• • • • • • • • • • • • • • • • • • • •							
Tel (Home):								
Which comp	utor(c) if	any do 1	mu nwn?					

Technical EORUM

Richard Fairhurst is our mate, He writes the Techie Forum. He had some lovely trousers But he tripped and fell and tore 'em. (You're fired. - Ed)

Os+As

Type-in troubles

Many complaints received about programs running incorrectly: true that some progs simply do not run true. (No it isn't. - Richard) Nothing worse than clattering away at keyboard even with Typerighter only to learn prog is flawed. Often find progs with READ A\$: POKE a, VAL("&"+a\$) or x=VAL("&"+b\$) or IF VAL("&"+chk\$) or similar never work. Yet progs supplied on tape/disk containing routines often run perfectly. Are these 464 specific?

Norm Roberts Australia

Do you have something against verbs in sentences? Anyway... no, you'll almost never find 464-specific programs these days. The lines you mentioned perform the function of reading in hex bytes (usually for machine code purposes) from DATA statements.

If the program doesn't work, you've made a mistake in the DATA statements in the Type-In: search through checking that you haven't mixed up the letter I for the number 1, the letter O for the number 0, etc. (Hex bytes are made up of the numbers 0 to 9 and letters A to F only.)

The Magnificent Seven

- 1. I have recently bought an Amstrad 464 Plus. In Advanced Art Studio (tape version), I can draw the picture but can't get it to save onto my tape. I have tried to click Save: my tape starts and after a while stops. Then, when I switch off the computer and try to load, nothing. Do you know what's wrong?
- 2. I read in AA how to upgrade 64k to 128k. What parts are needed? I got the 64k RAM pack with Art Studio – would the parts be inside that? 3. Although **AA** is the best, are there any other mags for the Amstrad?
- 4. What is a toolkit, and what is it for?



- 5. Would any other games for other computers work on the Amstrad?
- 6. I have seen some games that say IBM PC compatible. Is the Amstrad one of these? 7. On getting the 64k RAM pack, it said to type EMULATE and it would act like a 6128. However, when I did, all I got was Syntax error. Did I do

Peter Doyle Ireland

something wrong?

- 1. Make sure you press Record and Play on the tape recorder, with a blank tape in it, before you do any clicking...!
- 2. You have 128k now: 64k in the Plus, and 64k in the RAM pack. There'd be no point in putting any extra chips in the Plus, because the extra memory is already supplied by the RAM pack.
- 3. There aren't any other news stand magazines. However, read Tim Blackbond's Public Image column, which regularly reviews fanzines (enthusiasts' magazines) for the CPC and Plus. Tim himself runs one of the best, Artificial Intelligence, which is thoroughly recommended. 4. Taking apart your CPC? A toolkit program

usually gives you utilities to develop programs

- with, or such like. If you don't know what it means, you don't need it.
- 5. No. Readers everywhere, take note.
- 6. No. Amstrad do make a range of PCcompatible machines, but the CPC and Plus aren't PC compatible at all.
- 7. First of all, load the software supplied on tape with your RAM pack. Then type IEMULATE (the I at the beginning is important). This should work!

Connectivity

I have just been given a Sinclair Prism VTX5000 modem. Can you please tell me if this is compatible for use with my CPC. Also is it possible to use a printer (Brother HR-10) which has a serial connection on it? I look forward to hearing from you.

KM Dalton Essex

The modem is unique to the Sinclair Spectrum, I'm afraid. Spectrum owners are a bit starved for modems, and can really only use this one - CPC owners, with the right interface, can use almost any (other!) modem available.

You can use the printer, but you'll need a

serial interface first (try Siren Software or Avatar). Be warned that, if your printer isn't Epson-compatible (look in the manual), few, if any, graphics programs will print out on it. Wordprocessors should be okay, too. The serial interface can be used to connect most modems to your CPC, should you want to buy one...!

Driven mad

I have an Amstrad CPC 464 and have just purchased the Siren Software A-drive package, which I am very happy with. Until the purchase of the disk drive. I was unable to use my dk'Tronics 256k Silicon Disc which I had bought for the memory expansion capabilities and modified using the article in AA46. Now I can use both drives, but I am unhappy with the measly 178k on my A-drive. I noticed recently that you put Serge Querne's Magic DOS on the covertage, but unfortunately it only formats to the B-drive.

I wondered if I bought an ABBA and a side switch from Avatar, would I then be able to change my external 3.5" A-drive for the internal RAM B-drive, and thus be able to format my disks to 800k per disk: then, once I'd reversed the disks again, would I be able to access the new format from my A-drive or would I be better off just buying S-DOS which I understand would enable me to access 800k from my A-drive?

Also, I am particularly fond of The Bard's Tale and my delight upon being able to load it quickly from disk (using the Multiface) rather than wait hours for it to load from tape soon diminished when upon transfer of the main game as a test, the computer (after loading the first file okay) then proceeded to access the tape mechanism and totally ignore the disk drive. I have a little knowledge of machine code, and upon examining the BOOT file using a disassembler, I discovered firmware CALLs to the tape and not the disk drive, which I assumed might be taken care of during the transfer. I would be very grateful if you could also help me out on this point as it is driving me insane.

Nigel Shipp King's Lynn

Your disk drive question first. Unfortunately. Magic DOS disks only work in the B-drive - even if your A-drive is a 3.5" one. S-DOS is probably a better bet, as it lets you use its disks in either drive. Remember you'll need a ROM-board, though. STS Software has moved recently, to 58 Graiglwyd Road, Cockett, Swansea SA2 OXA. To be fair, Avatar's MS800 lets you use its disks in the A-drive, too. It's cheaper if you don't already have a ROM-board, but S-DOS is a lot less hassle and easier to use.

The Bard's Tale tape loader? Aaaargh, don't remind me... I used to be an avid player of this game until a program bug made my saved game file (with a party that I'd spent weeks building up) inaccessible. Your normally placid technical

writer suddenly became an axe-wielding homicidal maniac. As far as your transfer problem is concerned, the point about the Multiface is that it saves an exact copy of what's in memory to disk. So, if it says in memory that you're using the cassette system (most probably because the disk system hasn't been initialised), this is what the Multiface will record in your disk copy.

What can you do? Well, if you know something about machine code, all the better. Have a look at the CALLs in the loader (and, once that problem's solved, the main game) to access the tape. I have a feeling that &BCA1 may be used to read data directly from tape, and &BC9E to write it: if so, you're in trouble, because this system is completely incompatible with AMSDOS (which doesn't even bother to emulate it, as it does the other firmware calls). In this case, you'll have to completely rewrite the tape routines to load and save using your own system. Disc routines aren't usually too tricky to write, though: since you'll almost certainly just be saving one block of memory in each file, you needn't worry about finding space for the 2k input/output buffer, either.

Otherwise, it should be a matter of initialising AMSDOS using the call at &BCCE (if you want to initialise S-DOS or similar, too, use &BCCB), and then jumping into the Bard's Tale, which you should ensure does not reset the firmware to a normal (tape-based) state. (You'll need to initialise AMSDOS whatever you do.) This is certainly a feasible project - if you decide to attempt it, good luck, and let me know how you get on...!

Video star

1. How do you make an overscan routine in a) BASIC and b) machine code without getting scrambled and twisted lines? Can this be done without a great deal of programming? 2. How do you execute a palette switch half way down (or somewhere on) the display? I know you

have to use something kicked by KL_NEW_FAST_TICKER, but how do you do it?

3. I imagine it would be quite complicated, but how on earth do you display all 27 colours on screen at once (especially in MODEs 1 and 2)? 4. Where are the inks stored in memory, and what is the machine code equivalent of the INK command?

John Marsters Halesowen

Two letters from the same place in one issue: is Halesowen to the CPC what Manchester was to crappy music?

TECHNICAL FORUM (21)

1. The Amstrad's firmware is designed around a 40 by 25 (in MODE 1) screen. Change it and it gets very confused - it wasn't made to cope with different dimensions. This means that you'll have to write your own screen access routines, which isn't much use for BASIC, but in machine code you'll probably be using specially written sprite routines anyway which you can adapt to the new screen lavout.

2. Dead easy. Here's a machine code routine to change the border colour half-way down the screen using that technique:

org &8000 ld a.O: ld (count), a ld hl, block: ld de, routn ld bc. &8100 call &BD19: call &BCE0 routn ld a, (count): inc a ld (count),a cp 3: jr z,halt3

cp 6: jr z,halt0 .halt3 ld bc,&7F10: ld a,64+12

out (c),c: out (c),a .halt0 ld bc.&7F10: ld a.64+11 out (c),c: out (c),a ld a,0: ld (count),a

.block ds 9 .count db 0

Okay, so what does it all do? Well, the first few lines simply set up the interrupt: DE contains the

Printing problem

Not long ago I purchased a Star LC-200 colour be solved: this program is designed for Star printer. I've been using GPaint, but it will not print out in colour: just in black, or one single colour. I have tried other packages (Melbourne Draw, Image System) but they do the same. Can you solve my problem? And could you recommend some good clip art discs? **Stuart Clenton**

Colour printers aren't a very widespread add-on amongst CPC users, and have only emerged in great volume recently. This means that very few programs support them. However, pick up a copy of Colourdump 3 and your problems will

printers like yours, and outputs screens (slowly) in glorious technicolour. The program's makers, MJC Supplies, are unfortunately no longer with us - however, see if you can pick up a secondhand copy somewhere.

Most PD libraries can supply you with a good selection of clip art at cheap prices. You don't get to see exactly what you're buying before you order it, but it's so cheap it hardly matters.

Alternatively, Goldmark Systems have the Graphics Galore range of clip art, where you do get a nice printed catalogue of every item, but it's many more times more expensive.

- 1. When creating loading screens on tape, messages like 'Loading <filename> block <number>' come up. Is there any way to stop this? Otherwise it means all my programs will have to be disk-only.
- 2. I have heard that some commands are 6128 only. Which ones are they?
- 3. Do you need copyright to use screenshots from disk?

Andrew Hughes Sheffield

address of the routine to call every 300th of a second, HL the address of a 9-byte work space for the firmware. C the ROM number (since your routine isn't underneath a ROM, 0 will do), and B the event class (&81 for a regular RAM-based event like this).

A count is held of how many ticks down the screen we are. This can be from 0 to 5, depending on where the electron beam that draws the screen is. (This is initialised to zero at the start, when the beam should be at the top of the screen. To make sure that the beam is at the top, we do a CALL &BD19 just before setting up the fast ticker event.)

The routine adds one to this count every time it's called. If it reaches 3 (half-way down), then it sets the border colour to red. If it reaches 6, this is over the limit and it should be reset to zero again, because the beam is at the top of the screen - so we do that, and change the border

The result is a border which is white at the top and red at the bottom of the screen.

One of the best games I ever played was called Skool Daze... it never came out on the CPC, unfortunately. To your questions:

- 1. Prefix the filename with an exclamation mark when you try to load it. So, instead of typing RUN "PROGRAM you would use the line RUN
- 2. FILL, GRAPHICS PEN/PAPER, FRAME, CLEAR INPUT. COPYCHR\$, DEC\$, DERR, CURSOR, MASK, and ON BREAK CONT. Most of them can be emulated by the 464 (see past AAs).
- 3. If you're going to use a screenshot from a commercial game or utility, strictly speaking, ves. However, if you're using it as part of a review of that program or tutorial on how to use it, you'll be okay.

How does the ink changing work? It would be nice if we could use the firmware routines to change ink. However, these are set up so that inks are changed only when the beam is at the top of the screen, and as we want to change it in different places each time, this would be a bit useless, Instead, we access the hardware directly. This is done by sending the ink number to change - 0-15, or 16 for border - to the port &7Fxx (as in ld bc, &7F10: out (c),c), and then sending the colour number, plus 64, to change it to. Warning: the colour numbers for direct hardware access are not the same as the 0-26 values we all know and love. You can find a list of what they are in SOFT 968, the Firmware Guide. 3. Using the technique above, change colours at certain interrupt points down the screen. Alternatively, you can use the demo-coder's technique of synchronising your program's execution to where the electron beam is on the screen, and changing the colours at the start of every pixel line. If you want more info on this, write to us and let us know.

4. Inks are stored in different places in memory with the different models of the CPC. However, there are some firmware routines to set them, in addition to the method outlined above. With B and C holding the two inks to be flashed between (make them the same if you don't want flashing), CALL &BC38 to set the border, or CALL &BC32 to set the ink number contained in A. To find out ink values, use CALL &BC3B for the border, and CALL &BC35 for the ink number contained in A.

Membrane damage

I have a 664 with a malfunctioning keyboard. On inspection, the keyboard membrane was found damaged. Temporary repairs using conductive paint were only partially successful - some keys still don't work. Have you any suggestions for suppliers of these membranes? Do you know if they are available for the 664? If not, would a 464 keyboard work with some work on the casing? I'm an electrical/electronic engineer so there is no problem working on this gear. H Wheeler

Sheffield

Two from Halesowen and two from Sheffield in the same issue! All the spare parts available for the CPC are sold by CPC Ltd. of Preston, Lancs. If you're an electronic engineer you may know of them already - try to get their trade price catalogue, because it's a lot cheaper!

There shouldn't be too much of a problem using a 464 keyboard with a 664 CPU: to check, take the ribbon cable lead from the 464 keyboard, and replace the 664 keyboard cable which plugs into the main circuit board with it. If you can type things in as usual and it works properly, you're okay. Otherwise, I wouldn't bother.

Food for thought

I am designing an automated cooking system

Fighting corruption

I am very new to computing and purchased a second-hand 6128 some four months ago. With it came some spare disks including two system disks. Sides 1, 2 and 3 of these are good in so far as they have done what I have asked of them. I have been able to make back-up copies of them. The problem came when I tried to copy side 4, CP/M 2.2 System Utilities. I can load to track 25, then I get an error reading 'Disc error track 26 Sector &02, Data error within file MOVCPM.COM' and have to

I would like to make back-up copies of this and Mini Office II. Does this mean that my copy of side 4 is useless, or am I making some silly error? When I enter the command DIR I get a complete reading of the faulty side. Can you help a poor learner please?

RI Elms

Isle of Wight

First the bad news: side 4 is corrupt, and you won't be able to use all of it. However, you will be able to recover most of it: format a new disc (System format), and copy all the files except MOVCPM.COM onto this

disc using a file copier, such as FILECOPY.COM on side 3 of your system discs. You'll be missing one file, but it will almost all be there.

The reason why you get a complete reading when you type DIR is that, every time a program is put on a disk, a note is made of this in the 'directory tracks' at the start of the disk. Even if the program becomes corrupted, the directory tracks won't know about this and will carry on showing the same thing. Typing DIR just lists the contents of the directory track, which explains why you get a complete reading.

It's not too desperate that you can't back this side up, anyway. It contains utilities for CP/M 2.2, an older version of CP/M which you're unlikely to use - CP/M Plus, supplied on sides 1 and 2, is far better. The utilities are fairly esoteric and useless for most people,

Mini Office II is protected against you making copies of it - a device to guard against software piracy, which unfortunately prevents users from making legitimate back-up copies. To back it up, you can use an 'intelligent' disk copier which will get around the protection: try Procopy (from Avatar), Nirvana (Goldmark Systems), or such like.

Nice try, but...

A chap called Mark Fisher, from Cornwall, wrote to Top Tips to commend DMP Computer Software of Wolverhampton. Apparently, 'the sofware [sic] comes quickly, and it is very cheap'. Great: we're all for new software houses supporting the CPC. Just one question, Mark... if you live in Cornwall, how come your letter had a Wolverhampton postmark?a

involving a CPC as controller, which will control cooking apparatus (e.g. toasted sandwich maker) via a relay system. I need an input port, so I can feed back the temperature of the cooking device, and an output port, to switch it on and off. I am capable of designing the requisite circuitry, but what I want to know is: what can I use for input and output ports on my CPC? The BBC I used to own had plenty of provision for this, but the Amstrad seems sadly lacking.

Tim Whiteley Bradford

We get the strangest queries at Techie Forum! The CPC may seem to be lacking in I/O ports, but in fact there are two - one output, one input vou probably hadn't thought of. You can use the printer port as an output port, with 7 separate outputs, to trigger your relays: for input, you could try wiring something up to the joystick port. The necessary connectors in both cases should be available from Maplin.

To send a byte of data (7 bits only, i.e. a value from 0 to 127) to the printer port, you could try PRINT#8, CHR\$(n); if you have implemented support for the strobe line – or if you're using the strobe line as another output, you can send a full 8-bit value using OUT &EFOO, n. The joystick port is easy to monitor: simply use the standard BASIC JOY(0) function. All the pinouts you need to know about are in the back of vour CPC manual.

Top Tips

The Shadows

Like last month's subroutine to spruce up BASIC text display? Good, because here's another one. This one will print a string (in MODE 1) with a shadow (always in PEN 3) behind it. Without further ado...

1100 'Print shadow string (a\$) 1110 PLOT 16*POS(#0)-14,412-16*UPOS(#0),3 1120 TAG: PRINT a\$;: TAGOFF 1130 PRINT CHR\$(22)CHR\$(1)a\$;CHR\$(22)CHR\$(0) 1140 RETURN

To use it, simply define the string in a\$, set the pen colour, move to the appropriate location,

and use the subroutine. For example, a\$="0range Crush": PEN 1: LOCATE 5.5: GOSUB 1100.

No more errors!

If you want to check a piece of data for errors after all, files do often get corrupted when transferred via modems, file transfer programs, copiers and such - you've probably come up with the solution of a 'checksum', where each byte is added up and the total used as a check. Fine, but very prone to errors: for example, if two bytes are reversed (a very common error), you'll find that the checksum remains the same.

This short Z80 subroutine will do the job. It uses a form of error-checking known as CRC (Cyclic Redundancy Check). First of all set HL to be zero, and then CALL this routine (with E containing the appropriate byte) to update HL to a new value. When you've finished, HL contains the CRC for the bytes you've fed in. (The routine corrupts AF and B.)

.crc ld b.8 .updlp rlc e ade hl.hl: ir ne.skipit ld a,h: xor &10: ld h,a ld a.l: xor &21: ld l.a .skipit djnz updlp ret

RIP your CPC

No, not a gloomy piece about how the CPC has had its day: we're not into that sort of thing at AA. Instead, a warning - apparently, if you quickly switch the tape motor relay in a CPC on and off repeatedly, then it will overheat before long.

Okay, this isn't exactly the sort of thing you're going to do too often. But, while developing a machine code program, this has occasionally happened to me by accident.

If you find yourself in the same situation, don't leave it running to see what the other bits of the program do - reset and iron the bug out immediately!

Top tape tip

It's a dead giveaway when your whizzy new game loads from tape in the same boring fashion, with Loading ANGEL DELIGHT block 1 messages and so on: kind of ruins the professional look you're aiming at, doesn't it?

Well, here's a superbly useful routine that lets you create your own custom tape loaders. complete with error checking and all. Just RUN this, and three new CALLs are available: CALL &ADDO to write a block of memory to tape, CALL &A003 to read one from tape, and CALL &A006 to verify a block.

All the CALLs take four parameters: the first is the memory address of the data in question, the second its length in bytes, the third the 'sync character' (a number from 0 to 255 which can be used to distinguish blocks from each other), and the fourth the (integer) variable to return the

result in. For example, to write the screen to tape with sync character (sav) 45 and return the result in a%, you would type a%=0: CALL &A000,&C000,&4000,45,@a%.

The value of all is 0 if no error was encountered, 1 if ESCape was pressed, 2 for an 'overrun' read/write error. 3 for corrupt data on the tape, and 4 (in the verify routine) if the data did not match.

All okay? Here's the routine. Incorporate this into your BASIC loader and you can write a professional loading system for screens, sprites, machine code, character sets and such like... most impressive!

10 MEMORY &9FFF 20 FOR n=&A000 TO &A03F 30 READ a\$: POKE n, VAL("&"+a\$) 40 NEXT n 50 DATA C3,09,A0,C3,12,A0,C3,1B,A0,CD,24 .AR.CD.9E.BC.C3 60 DATA 38, A0, CD, 24, A0, CD, A1, BC, C3, 38, A0 .CD.24.A0.CD.A4 70 DATA BC.C3,38,A0,FE,04,20,22,DD,7E,02 ,DD,5E,04,DD,56 80 DATA 05,DD,6E,06,DD,66,07,C9,DD,6E,00 ,DD,66,01,DC,47 90 DATA A0,3C,77,23,36,00,C9,3E,FF,C9,E1 ,09,43,52,54,53

The End

And so we come to the end of another Techie Forum, If you have any questions of a vaguely technical nature, don't send them to Reaction. send them to me at:

Technical Forum Amstrad Action 30 Monmouth Street BATH BA1 2BW

If you don't do that, then those idiots Tim and Simon will get hold of the letter and who knows where we'll be. They'll print the letter in Reaction and answer it with some useless wibble about how bad the radio reception is in their office and you'll never find out what you wanted to know. Honestly, they're just a couple of... (Snip. - Ed) ●

Time after time

The TIME function in BASIC is useful, but it can be a bit of a pain to have to store the original value and subtract it from the later value to time how long a given process or event takes. A simple solution here: a short machine code routine to reset the time count to zero. Just RUN this and, from then, CALL &AF00 will set TIME to equal O.

10 FOR n=&AF00 TO &AF08

20 READ a\$: POKE n, VAL("&"+a\$) 30 NEXT

40 DATA 11,00,00,21,00,00,C3,10,BD

D.19.BD.01.01.01



Part four of Simon Forrester's full-on raging machine code tutorial. Like, totally excellent, man.

Hi there, and welcome back. This month, we're carrying on with our wonderful Breakout clone. We've just modified last month's listing slightly and you can find the fully modified version elsewhere on the page, with the various bits highlighted.

This month, you see, we've added a fab little bat into the fray. You can control it using the z and x keys, though make sure you've got CAPS LOCK turned OFF. The program won't like it on, as it won't recognize the keys. There's a simple remedy for this, that we'll look at next month, when we take a breather and tidy up the program, add a title screen, etc.

I'm afraid I'm not going to go over all the old stuff again it's been highlighted in the listing, you can find its explanation right here:

Mess about

Of course, the whole idea of a tutorial such as this one is that at any point you like you can branch off from the main course slightly and start experimenting on your own. For example, try changing the bat and ball characters, the screen boundaries (by putting the whole thing in a different mode and finding out where the boundaries are checked), or basically, do absolutely anything you like!

You could even try writing a completely different style of game, applying the same sort of techniques you've seen in this series. And month after month, the more I cover of our Breakout game, the more you'll be able to do with whatever it is you're working on.

All I'm trying to say is that learning machine code is all about experimentation, so never feel afraid to mess about and tinker with things- to see what they do. With the sort of commands we've been dealing with, it would be impossible to damage your computer through typing something in what have you got to lose?

Details of the listing

ld a.&01 call &bc0e

Ooh crikev missus - it's another one of them there new fangled firmware calls! This one is really simple though, as it's the equivalent of the MODE command in BASIC. You need the mode in the accumulator though, which is why it's set up just before the call.

1d a.12 ld (phat).a

The reason for the positioning of these two lines are purely for neatness purposes. They are placed immediately after other variables (such as the ball's position and displacement bytes) because they are also setting up variables - the position of the bat (in text co-ordinates on the x axis).

call batdis

This is a call to a routine to display the bat, which will be explained in full later.

cp 24 call z.batdet

As well as detecting when the ball hits the bottom of the screen (a routine which will actually be taken out later on in the series), we need to detect when the ball is at a position on the y axis from which it could be touching the bat. This is why we check for 24 - it's the line above the bat. If it is, we call the bat detection routine (which will check to see if the x axes match).

.bat	d i	s
db	åí	21
db	5	5
.pba	ıt	
db	0	
ca.	11	&bb?

P. D.		Party Party Party Party	
3550	68 68 68 68	NO NO NO NO	68 89 89 89
3E 69	68 68 68 68	80 80 88 80	68 68 68 58
3E79	68 68 68 68	80 80 80 50	88 88 88 B8
3880	68 68 69 69	NO NO NO NO	68 69 69 59
Æ90	ê8 ê8 ê8 ê8	100 100 100	68 68 68 56
38 160	că că că dă	89 89 89 89	ê6 ê6 ê6 b6 ·
3600	êB êB êB GB	16 16 16 16 16 16 16 16 16 16 16 16 16 1	ê8 ê8 ê8 b6
300	čã čã čã dã	16 16 16 16	ee ee ee ee
NE LE		10 10 10 10	êb êb 6b 66
SE LO	68 68 68 68	THE THE THE THE	
3E 00	68 68 68 68	股股股股	
TEPO	68 68 68 68	89 89 89 89	68 68 68 BS
4880	ME 61 12 16	99 32 85 49	3C 32 4F 49
4810	73 FO CO 14	49 30 39 00	5A 18 3A 85
4833	48 66 12 15	49 FE 19 CC	51 48 FE 81
4833	FG 48 30 21	卵卵8832	E6 48 JE 28

imbers, numbers everywhere, and not a drop to drink. Or something like that.

68057 68058 68068 68068	99EC 99EE 9971 9979	CD 75 49 3E 82 32 4F 49 C9		tall id id ret	5) 8, 4)
66662 68663 68663 68664 68665 68665	4915 4918 4918 4918 4918 4918	81 14 14 CD 38 BC CD 19 BD 81 B1 B1 C3 38 BC	.flash	3d ta]] ta]] ld ie	Pi Bi
98067 98068 98068 98068 98068	93E9 93E9 93E5 43E5	21 R3	.tocate .gpos	dh dh	ži R

The ed's school colours were pretty much like this. Apparently he always hated school.

And we've got to the routine that displays the bat on the bottom line of the screen. As you can probably see, we've used the same method of storing the bat location inside a command as we did with the routine that positioned the ball last episode. The call to &bb?5 is the same - it locates the text cursor.

ld a,&d6 call &bbSa ld a.&8f call &bb5a ld a,&d? call &bb5a

This is the part that actually draws the bat (made up of three ASCII characters) on the screen. If you want, you can look up the ASCII characters n the table in your manual, and maybe replace them with something you feel is more appropriate, but for now, we're going to stick with a few blocks.

.batlft

Okay, so here's the routine to move the bat left:

ld a, (pbat) cp 1 ret z

Firstly, check the bat isn't at the far left of the screen. If it is, return so that the bat doesn't move off the screen and crash.

1d 1,25 ld h.a call &bb75 ld a.&20 call &bb5a

This bit prints a blank space on the right hand square of the bat, making sure there isn't a trail of bits of bat behind the moving object.

ld hl.pbat dec (hl)

Oh, all right then, here you are

Okay, okay, I give in. If you're trying to do this and you still haven't got an assembler (although you'll have to get one if you want to take this seriously), here's the complete program in hex:

LAFI 100.DATA.3E,01,CD,0E,BC,3E,01,32,A5,40,3 2.84.40.3C.32.6E LAMM 110 DATA 40.32.6F.40.3E.0C.32.AC,40,CD,A

D.21.6F.40.86.32

A,40,CD,19,BD,CD LAGI 120 DATA - A3.40.3E.20.CD.5A.BB.3A.A4.40.3

LALN 130 DATA A4, 40, FE, 19, CC, 70, 40, FE, 01, CC, 7 9,40,FE,18,CC,F4

LAAI 140-DATA-40.3A.A5.40.3D.21.6E.40.86.32.A 5,40,FE,28,CC,82

LADP 150 DATA 40 FE.01.CC.88.40 CD.A3,40,3E,2 A.CD.5A.BB.CD.09 LABO 160 DATA BB.FE.7A,CC,CO,40,FE,78,CC,DB,4

0,03,10,40,00,00 LAKI 170 DATA CD. 94.40.3E,00.32,6F,40,C9,CD,9

4,40,3E,02,32,6F LAJI 180 DATA 40, C9, CD, 94, 40, 3E, 00, 32, 6E, 40, C 9,CD,94,40,3E,02

LAOJ 190 DATA 32, 6E, 40, C9, 01, 1A, 1A, CD, 38, BC, C

LAAK 200 DATA C3,38,BC,21,00,00,CD,75,BB,C9,2 1,19,00,CD,75,BB MALF 210 DATA 3E, D6, CD, SA, BB, 3E, 8F, CD, SA, BB, 3

E.D7.CD.5A.BB.C9 LAPL 220 DATA 3A.AC.40.FE.01.C8.C6.02.2E.19.6 7,CD,75,BB,3E,20 LAPO 230-DATA-CD, 5A, BB, 21, AC, 40, 35, CD, AA, 40, C

9,3A,AC,40,FE,26 LABN 240 DATA C8.2E.19.67.CD.75.BB.3E.20,CD.5

A.BB.21.AC.40.34 LALL 250 DATA CD, AA, 40, C9, 3A, AC, 40, 47, 3A, AS, 4 0.88.CA.0A.41.04

LAHK 260 DATA B8, CA, 0A, 41, 04, B8, CA, 0A, 41, C9, 3 E.00,32,6F,40,C9

CAHE 270 DATA .**

call batdis

After that, all that's left to do is alter the x axis, and print the bat!

.hatroh ld a, (pbat) cp 38 ret z 1d 1.25 ld h,a call &bb75 ld a.&20 call &bb5a ld hl.pbat inc (hl) call hatdis

This routine works in exactly the same way as the previous one. Any changes are purely due to the fact that he bat's travelling in a different direction.

.batdet ld a, (pbat) ld b,a ld a.(xpos)

In order to check whether the bat is actually touching the ball on the x axis, we need to take the bat's x position, and the ball's x position.

ep h jp z,batdty

If they're the same, then they're touching, and we can call the routine to send the ball upwards again! inc b

If they're not touching, we move on to the next block of the bat,

cp b jp z,batdty inc b

Butes tree 22352 Insert eminly:call abd19

Of course, if we really loved you we'd print a picture of our Breakout game in action.

ep h jp z,batdty And keep repeat the process for all three blocks of the bat.

If the bat and ball aren't touching however, we can let the program carry on it's merry way.

.batdtu ld a,0 ld (ydis),a

op 1

cp 24

dec a

call z,balldn

call z.batdet

ld a, (xpos)

ld hl,xdis

ld (xpos),a

add (h1)

cp 40

Remember the routine to send the ball upwards when it hit the bottom of the screen? This is exactly the same, but without the little flash - so that you can tell the difference between the ball hitting the bat or the floor.

Well, I should think that's about all we can do for this month...

Next month we'll be making our program look nice and pretty, by smartening up the graphics a bit, before we think about adding the bricks. Till then though, toodleoo.

The Program

org &4000 call z,balllf limit &4fff cp 1 call z.ballrt ld bc.&lala ld a.&01 call &bc38 call locate call &bc@e call &bd19 1d a.&2a ld a,1 call &bb5a 1d bc.&0101 .ip &bc38 ld (xpos),a call &bb09 ld (upos),a cp _z .locate inc a db &21 call z,batlft ld (xdis),a ld (ydis),a .ypos cp _xl db 0 call z,batrgh ld a,12 xpos ld (pbat),a db 0 jp mainlp call &bb75 call batdis ret xdis db 0 mainlp call &bd19 udis .batdis db 0 db &21 call locate db 25 1d a,&20 call &bbSa .phat call flash db 0 call &bb75 ld a, (ypos) ld a,0 ld (ydis),a ld a,&d6 dec a call &bbSa ld hl,ydis ret 1d a.&8f .balldn add (h1) call flash call &bb5a ld (ypos),a cp 25 1d a, 2 1d a,&d7 call &bb5a call z,ballup ld (ydis),a ret

.balllf

ld a,0

.ballrt

call flash

ld (xdis).a

call flash

ld (xdis),a

1d a,2

1d a,&20 call &bb5a ld hl.pbat dec (h1) call batdis ret .batrgh

ld a, (phat) ср 38 ret z 1d 1,25 ld h.a call &bb75 058. a hf call &bb5a ld hl.pbat

inc (h1) call batdis ret .batdet

ld a,(pbat) ld b,a ld a, (xpos) op b jp z,batdty inc b cp b jp z,batdty inc b

cp b jp z,batdty ld a, (pbat)

.batlft

cp 1

ret z

add 2

1d 1,25

ld h.a

call &bb?

.batdty 1d a,0 ld (ydis),a

Public macle

This is the bit where the Ed makes some amusing introductory remarks. He's on Sheepsoft holiday, so here's Tim Blackbond with the PD stuff.

You'd better be in a news kind of mood – that's just what you're going to get. Never before have so many things happened on the PD 'scene'... In fact, this introduction alone is a waste of space... I'd better stop it. Like right now...

Random mutterings

Libraries 'n' stuff

PD Fun

Simon Walker of PD Fun has the first of this month's many library re-shuffles. His catalogue has had all the rubbish BASIC programs scraped out and replaced with top-quality games that some people may enjoy. PD Fun is also the first library on the CPC ever to promise 178K of software per disk. That means no irritating

menus taking up eight valuable kilobytes. One disk side will cost you as little as 50p, so you really can't go wrong. Simon's address is: 41 Michealgate,

Kirby Lonsdale, Via Carnforth, Lancs LA6 2BE.

Another library organisation has hit Sheepsoft HO, The librarian, Paul Fairman now has a staggering 194 sides of software all for a deafeningly cheap 20p a side. Certainly well worth the cost of a few postage stamps.

Write to: 39 Woodlands Road, Barry, South Wales CF6 6EF.

Presto PD

Yes, spring cleaning fever has also got into Matt Gullam of Presto PD. For the second time, he has removed all the rubbish from his library "to get rid of the stuff he missed last time". Presto PD flogs software at just 50p a disk side – Write now to: 58 Graiglywd Road, Cockett, Swansea SA2 OXA. Beware, Matt Gullam MAY be moving house AGAIN soon (within the next six weeks). although he might not. The tough decisions faced by a person that can't stay in one place for more than a minute, eh?

Presto PD, the library with the, erm, most, has just announced two new products. First up is IFFCon. This is a package that converts IFF picture files (Amiga, Macintosh, etc) to CPC format. Next, there's DOSCopy - a package that transforms MS-DOS files into AMSDOS format. and vice versa. Both titles are 25p per side, so you should be able to get both of these on one disc or a mere 50p! Oh yeah, you can also buy

3" discs from them at £1.75 each. Find Presto at 58 Graigluyd Road, Cockett, Swansea, SA2 OXA.

Spot the difference

Potential Difference is a new bimonthly fanzine designed to cover all aspects of the CPC with a very noticeable lean towards Public Domain software. For a mere 70p you get the latest issue (ie. Issue two) featuring 24 pages of neatly stapled A5 including reviews of two top PD libraries and a number of commercial budget games. There's also a run-down of the best CPC driving games available. It sounds pretty hot stuff! If you can't wait for the review then the editor, Chris Goodwin, can be contacted at: 47 All Saints Drive, North Wootton, Kings Lyn, Norfolk PE30 3RX

New Face Hugger utilities

Europe's finest programmer, Andreas Stroiczek (alias Face Hugger – The man behind Crystal Mission, Power Tetris and The Ultimate Megademo) has now unleashed two serious utilities into the public domain. The first is an AMSDOS alternative to the CP/M to MS-DOS file converter, Two In One (the one from Moonstone Software). It allows files to be ported from a CPC on to an MS-DOS format disk for use on an IBM compatible PC. Useful for doing that school/college homework at home. The second utility is another file converter, this time for those CPC artists with access to an Amiga – it converts files from the Amiga '.IFF' format to (yes, you guessed it) the good of CPC! Expect full reviews

Fanzine review

RundSchlag Overkill

Send three International Reply Coupons to: BIOS, PO BOX 27, W-7959 Schwendi, Germany.

Rundschlag can only be described as the International CPC Notice board. Imagine a really big house, yeah? And in this house is every CPC user in the world, RundSchlag is the cork pin-board on the kitchen wall. That's the best way it can be described. Sorry

The first thing that hits you about the magazine is the presentation. Each of the forty pages is either poorly laid out on a DTP package or just printed from a word-processor from various people on the CPC scene. But then, you can't expect the writers to spend hours on every page when you consider that the magazine is free. The only thing you pay for is the photocopying, then like public domain software, you can re-copy it and pass it on to your friends to your heart's content.

The articles are written in a wide range of languages (including a small section of English text). If you want to know what is going on in Europe,

there is enough English to keep you clued up on what is going on, the rest of it is basically coders passing messages onto fellow coders ("Matt Gullam: I like your fanzine very much!" is one of the many greetings). A demo scrolling message on paper, if you will.

If you can speak French and German, you will obviously get more for the little you pay for. however, if English is your only known dialect, you can get a small amount of information but not that much

The idea of multi-language magazines always seems to fail in Britain (thanks to that lovely 'casual' British education system), although I'd expect they are very popular on the continent.



H	■ I just go out and buy it ■ Reserved by a newsagent
11	In what format would you like

By subscription

n what format would you like Amstrad Action?

How do you buy Amstrad Action?

- £2.95 with covertage
- £2.50 with no covertage
- £2.95 with more pages and no tape

I The Mag

General

Please mark any sections you would like us to drop with a D. sections you would like to see more of with an M, and sections you'd shrink with S.

- Amscene
- Serious reviews
- Technical Forum
- Type-Ins
- Interviews
- Reader Action
- Public Image
- Assembly Line
- Balrog
- Power Up
- Games reviews
- Venture Forth

- Reaction
- Cheatmode
- Small Ads

Do you enjoy the style, humour, and attitude of AA?

We'd like to know a little bit about you for our files. Fill in this form and you might get 50 quid.

- Hove it
- It's a little immature
- It's a bit too serious
- I despise it

Okay then, what about the artwork and lavout?

- It looks good and is easy to
- It could be better

Covertapes

Do you bother with the covertape?

Yes

No

How do you feel about the serious software we're giving you?

- I love it
- Not bad
- It's a rip off

And the games?

- Fab
- Bearable
- Complete tosh

Would you stop buying AA if it stopped carrying tapes?

- Yes
- No

And You?

How old are you?

- Under 10
- $\blacksquare 10 14$
- **■** 15 19
- \square 20 30 ■ 30 – 40
- =40-50
- = 50 60
- Over 60

Are you

- At college At school
- In full time employment
- Unemployed
- Retired

If you are in full time employment, what is your general occupation?

- Company owner/manager
- Computer
- Crafts/Tradesperson
- Creative ■ Emergency/Armed services
- Manual
- Office
- Professional

What is your approximate annual income?

- Pocket money
- Under £1000
- £1000 £4999
- £5000 £8000
- £8000 £12.000
- £12.000 £16.000
- £16,000 £20,000
- Over £20,000

What else do you do with your leisure time?

- Cycling
- Walking
- Buying/Listening to music
- Charity/Voluntary work
- Going to pubs/clubs
- Going to see bands
- Going to the cinema
- Playing a musical instrument
- Reading
- Watching TV
- Watching/Playing sport

What are your favourite kinds of game?

- Arcade adventures
- Beat-'em-ups
- Driving games
- Platform games
- Puzzle games
- Role-playing games
- Shoot-'em-ups
- Simulations

How long have you been using a CPC?

July 1993 AMSTRAD ACTION

- Up to 6 months
- Up to one year
- Up to two years
- Over two years

How long have you been reading Amstrad Action?

- Up to 6 months
- Up to one year
- Up to two years
- Over two years

What other computer magazines do you read and how would you rate them (out of ten)?

Which CPC do you have?

- CPC 6128
- CPC 664
- CPC 464
- CPC 6128+
- CPC 464+
- **GX4000**

What extra equipment do you own?

- External 3" drive
- External 3.5" drive
- Joystick
- Modem
- Printer ■ ROMbox

What extra equipment do you intend to buy?

- External 3" drive
- External 3.5" drive
- Joystick
- Modem
- Printer
- ROMbox

What other machines do you own (O) or intend to buy (B)?

- Amiga
- Atari Lvnx
- Atari ST
- C64
- Game Boy

- Game Gear
- Mega CD
- Mega Drive ■ Neo Geo
- **NES**
- PC compatible
- PC Engine
- Sega Master System
- SNES
- Spectrum

What's your address?	What's your address?	What's your address?	Who	are yo	ou?				
What's your address?	what's your address?	whats your address?	140						
			Wha	t's you	ır add	dress	s?		

Please tick here if you do not wish to receive direct mail from other companies.

Please take a few minutes to fill in the form and send it to:

Amstrad Action Monmouth Street Bath **BA1 2BW**

If yours is the form we pull out of our massive and attractively decorated hat, you'll get

Reader Survey 1993

New sequence Add frame Edit Frame Delete frame Swap Frames Save Load Catalogue Baud Action! Exit Backup can't believe it's a PD program. That sounds like a good idea for a TV ad keys to move pointer or SPACE to choose campaign. Hire me some cows.

on each of these utilities very soon indeed...

Sex, lies and Amstrad fun

The Irish fanzine, Amstrad Fun, has been printing malicious lies about various British PD libraries without first checking the integrity of the information. The one page feature, entitled 'Which PD Libraries Are Your Disks Safe With' starts by warning Richard Fairhurst not to re-open his library due to his slowness in returning orders (which, given his past record, is fair enough) and then moves on to accusing PD Fun of being 'a certain death wish' to order from, Simon, who was shocked when hearing the news said: "What profit is there to be gained from not returning disks? It just gives a library a bad name".

Also on the black list are Presto PD, accused of not returning disks, even though the editors haven't bothered to get in touch with Matt himself and find out the truth. Finally, the Sheepsoft librarian, Paul Fairman gets more than enough evidence to get together a reasonable libel case. The verbal stoning goes into the library name deriving from the fact that Paul has the brains of a sheep (allegedly) and is the most arrogant, rude and insulting person on the planet. Throughout the feature, the phrase 'From what we have heard' gets regular use. Far be it for me to have a guess at the source of the information, but the magazine's main contact does have the initials DH... Well, it's just a theory.

Irish power trippin'

A number of PD librarians have complained about the arrogant behaviour offered by the Amsof PD librarian, Derek Hyland. Apparently, Mr. Hyland

believes that any libraries that are not called 'Amsof PD' are not worthy of custom. A small warning to Derek, you will not be popular at all if you carry on as you are. Remember Alan Scully?

Commercial blues part two

RUN UT!

© Michael Beckett 1992
PUBLIC DOMAIN

There is a lot of controversy about several German games that are appearing in the public domain libraries across Britain. Although being around for a while, Drehdriss began life as a listing in the German CPC Amstrad International magazine, and is therefore protected under copyright. There is also a lot of confusion over the games Puzznix and Power Tetris. No one has managed to agree on the 'PD-ness' of those games yet. Even though CPCAI is a defunct magazine, there are rumours that it will be relaunched. If so, British PD libraries had better watch out...

More PD

I've been on at the management (Tim N, mostly) to give me some more room for the PD column. To judge from your letters, you seem to think that the PD scene is a pretty important part of the CPC world and I think I agree with you.

Anyway, Tim's agreed that Public Image can have an extra page, but only if it's dead good. so I need your help. If you run a PD library – let me know and I'll take a look at your collection. If you write PD software - let me know and I'll review it.

Anyway, that's your lot till next month.

The box with no name

Wow! And there'll probably be more next month! I need a lie down...

Thank you for the letters, free disks, fanzines, etc. There's bound to be more out there than I've already managed to look at, so please keep them, coming - I'll find space for them all soon.

And that address:

Amstrad Action 30 Monmouth Street BA1 2BW

...And please, DO NOT forget to mark your envelopes CLEARLY with PUBLIC IMAGE. I thank you, good night...

Software review

RUN VT! By Michael Beckett

Camcorders. Yes, the things that gave Jeremy Beadle another idea for a TV series are becoming more and more popular, but what do you do when you want to put nice, professional titles on your home masterpieces? As always, there's the public domain solution...

Run VT! was written as an upgrade to a listing printed in the July 1990 issue of Amstrad Action, as part of the big Multimedia special. In a nutshell, it allows the user (that's you, mates) to design a slideshow of screens which can then be placed at the beginning of a video cassette. Just think, no more frantic hunting for the televised version of the classic 1957 book by Richard Bertram Coles, 'Skin Diseases for Beginners'...

The top of Mr. Beckett's agenda when writing Run VT! was obviously to make it userfriendly. To make sure of this, the program utilises a smooth and incredibly well programmed pointer-system. There are no less than eleven main options to choose from, all chosen by simply moving the pointer over the box and jabbing the COPY key. The options allow you to: Create a new sequence, add frame, delete frame as well as frame manipulation and disk/file utilities.

The frame editor only allows text and block graphics (situated on the numeric keypad) to be placed on the screen (sort of like PageMaker Plus on one screen, only much more useful). Also, by placing a dot at the beginning of a line, double height and width text can be used, in order to outline main titles. When a frame is finished, a menu popsup which allows you to set the method of fade-in, the length of time it stays on the screen and the method for fade-out. There are a total of seven fade methods, including a normal clear screen, horizontal wipe, vertical wipe and screen disintegration.

When a sequence is completely finished, it can then be ported across to a video cassette. For this bit, you will need a lead (available from WAVE or as a hardware project in the July 1990 Amstrad Action) connecting your CPC to a video cassette recorder and a video cassette that is badly in need of titling. Then, the contents of the screen are recorded onto the video cassette. You are prompted when to start and stop the video recording.

For the true home-movie buff, you can't quite reach perfection without the use of Run VT!. however, those who don't have videos to title have a rather limited text-based artpackage. It is just a shame that screen files can't be incorporated into the slideshow along with the text. Oh well, you can't have everything I s'pose...

92%

Back Issues 2 ssues FRE

Sold out! Issues 1-65 • Still available! Issues 66, 75-85



licences plus review of the Picasso art package. On the tape - Glider Rider (full game), MIDI demo and three utilities.



Issue 87: Inside - the complete history of Dizzy and review of the Amstrad NC100 notepad. And! Football Manager 3 reviewed. Full game of Nexor on the tape.



Issue 88: Two complete games on the tape - Tankbusters and Penguins, Inside. Videomaster, Robin Hood: Legend Ouest and Crystal Kingdom Dizzy reviewed.



Issue 89: Inside - Ruvers' Guide to disk drives a look at CPC-stretching demos and Crazy Cars 3 reviewed Plus! Wriggler and three great utilities on the covertage.



Issue 90: The world's hugest collection of Multiface pokes (more than 478 of them) On the tape: Steve Davis Snooker (full game) and LARA (m/code utility).



Issue 91: All the dirt on who's doing what in the CPC world. Hacklt black box of tricks reviewed. On the tape: Tasword (word processor) and Colossus Chess 4



Issue 92: Just how do those floppy disc things work? Plus a review of the first 3.5 inch A: drive. On the tape: BooTracker (music utility). SYNTAX and Balloon Buster.



Issue 93: 101 interesting things to do with business software. Reviewed: Super Cauldron, Amstrad Pen Pad. On the tape:

• £20 worth of great software every month. · Top news, outrageous comment. detailed reviews. Games cheats and technical help. Unmissable features, useful tutorials. Everything you'll need to get the most

Subscribe to Amstrad Action and

get 12 issues for the price of 10

YOUR NO-OUIBBLE, NO-RISK GUARANTEE

To ensure you receive your magazine and tape quickly and undamaged, all overseas subscriptions are sent Air Mail

You can cancel your subscription at any time in the future and we will refund you in full for all unmailed issues. You just can't lose out!

Amstrad Action Back Issues

Post code **Method of payment (please tick)** Access 🔲 **Credit Card No**

I would like the following back issues...

UK price - original cover price ● Europe £5 ● Rest of the world £7 • Post and packing is £1 per order (regardless of size).

Please make all cheques payable in pounds sterling to Future Publishing Limited, and send the whole lot off to AA Bargain Basement, Future Publishing, FREEPOST, Somerton, Somerset TA11 7BR.

12 ISSUES

MY METHOD OF PAYMENT IS TICK YOUR CHOICE

For the dedicated CPC user

Not only will you get every issue of Amstrad Action for the whole of the next year delivered free to your door, you're getting two of them (that's TWO of them) for

this is a superb offer.

absolutely nothing.

And with such excellent

every month, you'll find that

software on the covertape

as well as getting the best

magazine around, you'll be

utilities, each one worth at

If you do your maths on

this one, you'll realise that it

really is a smart way to save

money and keep up with all

If you're serious about your

receiving an astonishing

selection of games and

least £20. Guaranteed.

the latest on the CPC.

machine, you'll see the

benefits immediately...

TOTAL PAYMENT £

If you are an existing subscriber please quote your subscription reference number here - you will find this on your address label

from your CPC.

VISA ACCESS CARD NO CHEQUE Make payable to Future Publishing Ltd

☐ EUROPE £47.25 ☐ REST OF WORLD £63.10

Enclose this coupon (together with your cheque if applicable) in an envelope and send to: AMSTRAD ACTION SUBSCRIPTIONS, FREEPOST, SOMERTON, TA11 7BR. YOUR SUBSCRIPTION WILL BE PROCESSED IMMEDIATELY. THIS COUPON IS VALID UNTIL 31ST JULY 1993

Yes! Please enter/renew my subscription to Amstrad Action at the all inclusive price of tick as appropriate

HAMF 170·xp=3:yp=18:h=2:GOSUB·260 BANO 180·PEN·1

HACF 200 xp=3:yp=24:h=1:G0SUB 260

GADL 210 . CALL . & BB18:LOCATE . 1,1:END

KACK 240.'...Parameters: (text\$,h,xp,yp)

HALH 230 · · · Printing · Routine .

GAEP 260 · FOR · ch=1 · TO · LEN(text\$)

GABH 270 · ch\$=MID\$(text\$.ch.1)

AA00 220::

AABP 250::

CADP 280 · GOSUB · 360

DAEP 290 FOR y=1 TO h

JALO 190 · text = "Normal · Height · text"

SINDELINS

Oh my hat, look at this lot! Readers's type-in programs aplenty for you to spend a few hours over. Splendid.

Staves

This little progette comes courtesy of Ted English. It's very short, and prints lots of lovely musical staves on the printer (if you've got one).

HAFL 10 REM Staves. . . T. English

FACB 20 · AFTER · 6375 · GOSUB · 90

IACM 30 PRINT #8, CHR\$(27) A"CHR\$(5) CHR\$(27) E

KAOK 40 · FOR · a = 1 · TO · S : PRINT · #8, STRING\$(78, 95) :

JAMA 50 FOR b=1 TO 3:PRINT #8, CHR\$(10):NEXT KACL 60.FOR.c=1.TO.5:PRINT.#8,STRING\$(78,95):

JABB 70 · FOR · d=1 · TO · 4 : PRINT · #8, CHR\$(10) : NEXT EAGK 80 · GOSUB · 40 : RETURN

DAKH 90 · END : RETURN

Graphic

AAJK 20 . 1

It's by Mark Holmes, and that's all I'm going to tell you. I like an air of mystery.

IABC 10 · ' · GRAPHIC · - · By · Mark · Holmes

IAOJ 30 · ' · For · Amstrad · Action · - · 1993 AALK 40.

MAAE 50.MODE.2:LOCATE.1,1:PRINT."P.L.E.A.S.E. ...W.A.I.T....."

JCID 60.ORIGIN.320.200:DEG:DEFINT.a-q.s-z:DIM ·h(401):FOR·a=0·TO·400:h(a)=-1000:NEXT:F OR - 4=100 - TO - - 90 - STEP - - 10:x=100:GOSUB - 120 :x1=y-100:y1=(-x-y)/2+z:F0R·x=100·T0·-10 0.STEP.-1

JBGA 70.GOSUB.120:MOVE.x1,y1:x1=y-x:y1=(-x-y) /2+z:IF.y1(h(x1+200).THEN.80.ELSE.h(x1+2 00)=41:DRAW·x1.41

HAND 80 · IF · x · MOD · 10=0 · THEN · GOSUB · 100

EAGB 90 · NEXT · x, y : END

ICEF 100 · x2=y-x:y2=(-x-y)/2+z:b=y:FOR · a=y-1 · T 0.4-10.STEP.-1:4=a:GOSUB.120:MOVE.x2.42: $x2=a-x:y2=(-x-a)/2+z:IF\cdot y2(h(x2+200)\cdot THE$ N.110.ELSE.h(x2+200)=y2:DRAW.x2,y2

FANF 110 · NEXT: y=b: RETURN

KAKO 120 · r = SQR((x*5) † 2 + (y*5) † 2) : IF · r = 0 · THEN · r =0.01

KAGE 130 · z = (SIN(r)/r) * 5000 + (COS(x * 5) + COS(y * 5))*10

CAFJ 140 · RETURN

Number Shooter

Okay, shoot the numbers with this fab game from Abdul Kayum. I really can't believe I'm getting paid for writing these introduction paragraphs.

EAFL 10. 'NUMBER . SHOOTER

EAMG 20.'(C).ABDUL.KAYUM

CAAE 30 · 'AGED · 14

DAJB 40.'APRIL:1993

DANK 50 · CLS: hsc=100



CAOL 60 - GOSUB - 530 CAOL 70 - GOSUB - 250 CADM 80 · GOSUB · 380 FANF 90 · 'MOVEMENT · AND · TIME HAFH 100 · LOCATE · x , y : PRINT · CHR\$ (240) JAPJ 110 LOCATE . 15, 25: PEN . 3: PRINT" TIME: . "; ti IAJD 120 · IF · INKEY(27)>-1 · THEN · 130 · ELSE · 140 FBDJ 130 · PEN · 1 : LOCATE · x , y : PRINT" · " : IF · x > 39 · TH EN·x=2·ELSE·x=x+1:LOCATE·x,y:PRINT·CHR\$(IADE 140 · IF · INKEY(67)>-1 · THEN · 150 · ELSE · 160 FBFJ 150 PEN · 1:LOCATE · x, y:PRINT" · ": IF · x < 2 · THE N·x=39·ELSE·x=x-1:LOCATE·x,y:PRINT·CHR\$(LAAE 160 · IF · INKEY(47)>-1 · THEN · GOSUB · 180 · ELSE · G0T0 - 179 JAGE 170 ti=ti-1: IF ti=0 THEN 570 ELSE 110 IALK 180 y=22:LOCATE x, y:PEN 3:PRINT"." PAEF 190 · ti=ti-1: IF · ti=0 · THEN · S70 · ELSE · LOCATE ·x,y:PEN·3:PRINT"." HAJJ 200 · LOCATE · x , y : PRINT" · " : y = y - 1 FABO 210 · LOCATE · x, y: PRINT"." HAOK 220 · IF · y=5 · THEN · GOTO · 230 · ELSE · 190 MABH 230 · IF · y=5 · AND · x=R · THEN · GOSUB · 450 · ELSE · Y =24:GOTO · 80 CAHH 240 - GOTO - 80 DACM 250 · SCOREBOARD IAAG 260 PEN 2:LOCATE 5,1:PRINT CHR\$(150) HALC 270 LOCATE 35,1:PRINT CHR\$(156) GAMP 280 · LOCATE · S.4 : PRINT · CHR\$(147) HANC 290 LOCATE . 35,4:PRINT . CHR\$(153) IABK 310 · LOCATE · i , 4 : PRINT · CHR\$(154) : NEXT

KALI 300 FOR i=6 TO 34:LOCATE i,1:PRINT CHR\$(KANF 320 FOR i=2 TO 3:LOCATE 5, i:PRINT CHR\$(1 IALN 330 · LOCATE · 35 . i : PRINT · CHR\$(149) : NEXT KAJP 340 PEN 3:LOCATE 13,2:PRINT"NUMBER · SHOO JAFE 350 PEN 1:LOCATE 6,3:PRINT SCORE: ";SC JAKA 360 LOCATE 20,3:PRINT"HI-SCORE: "; HSC CAKJ 370 · RETURN EAPN 380 · 'RANDOM · NUMBERS KABB 390.LOCATE.1,5:PRINT".... DAFD 400 · TL=5:PEN · 2 JAHI 410 · R=INT(RND*39) : IF · r=0 · OR · r=1 · THEN · 410 IAJN 420 NUM=INT(RND*10):IF NUM=0 THEN 420 GACO 430 · LOCATE · R-1 , TL : PRINT · NUM EAGA 440 · PEN · 1 : RETURN CAFP 450 · SCORING KAPA 460 LOCATE 1,5:PRINT" EANE 470 SOUND 5,150,4,15 DAAE 480 - SC=SC+NUM HAEE 490.LOCATE.14,3:PEN.1:PRINT.SC IAEH 500 · IF · SC > HSC · THEN · GOTO · 510 · ELSE · 520 IAAA 510.HSC=SC:LOCATE.30,3:PRINT.HSC FALF 520 y=24:PEN 1:RETURN FAAA 530 'INITIALISATION GAIL 540 x=20:y=24:sc=0:ti=1000 NAPM 550 BORDER 0: INK 0.0: PAPER 0: INK 1.26: IN

CALJ 560 · RETURN DAJK 570 - 'END - OF - GAME FAKD 580 . CLS: INK . 1 . 6 . 2: PEN . 1 HAKK 590 LOCATE . 16.10 : PRINT" TIME . UP ! " EBEM 600 · IF · HSC > SC · THEN · 610 · ELSE · LOCATE · 5 , 12 : PRINT"YOU . HAVE . A . HIGH . SCORE . OF . " ; HSC : GOT KAHO 610.LOCATE.9,12:PRINT"SORRY, NO.HIGH.SCO NAKL 620 LOCATE . 4, 14: PRINT WOULD . YOU . LIKE . ANO THER · GO? · (Y/N)" CAPP 630 · A\$=INKEY\$ EAHF 640 · IF · A\$="" · THEN · 630 JADD 650 · IF · A\$="Y" · OR · A\$="y" · THEN · CLS : GO TO · 60 JAFK 660 · IF · A\$="N" · OR · A\$="n" · THEN · CLS : PEN · 2 :E CAPK 670-GOTO-630 **Function Keys** Two really snazzy little programs – one allows you to create a file of function key definitions, and the other allows you to reload the file. And

K.2.21: INK.3.6: PEN.1

you've got Tom Ford to thank for that lot! OAAA 10.'.FUNCTION.KEY.DEFINER.AND.READER.-.b y·T.FORD·age·13

FAHJ 20. '. AA. is. the. best!

CAHK 30 . 'DEFINER

BBJG 40 PRINT"THIS PROGRAM DEFINES THE FUNTIO N · (F) · KEYS · ON · THE · KEYBOARD"

DALH SO.FOR.f=0.TO.9

CAKF 60 · k=f+128

BCED 70 PRINT"Input command for F"; f: INPUT as (f):INPUT"Suffixed.by.return";ch\$:IF.ch\$ ="y".THEN.KEY.k,a\$+CHR\$(13):b(f)=1

IAJG 80 · IF · ch\$="n" · THEN · KEY · k . a \$: b(f) = 0

IACG 90 · IF · ch\$()"n" · AND · ch\$()"y" · THEN · 70

FAGC 100 · IF · b=1 · THEN · b(f)=1

BABP 110 · NEXT

GAJP 120 · INPUT"filename";fl\$

HAKF 130 · IF · LEN(fl\$)>8 · THEN · GOTO · 120

EAEG 140.f1\$=f1\$+".KEY"

DAGP 150 · OPENOUT · f1\$

DAKK 160 · FOR · c=0 · TO · 9

FAGG 170.WRITE.#9,a\$(c),b(c)

BAIP 180 · NEXT

DAIC 190 · CLOSEOUT

OAAA 10.'.FUNCTION.KEY.DEFINER.AND.READER.-.b y·T.FORD·age·13

FAHJ 20.'.AA.is.the.best!

CANF 30 · 'READER

GAKM 40 · INPUT"filename";fl\$

EAED 50 . f1\$=f1\$+" . KEY"

DAFG 60 · OPENIN · f1\$

DANH 70 . FOR . f = 0 . TO . 9

FABE 80 · INPUT · #9, a\$(f), b(f)

CANF 90 · k=f+128

JADB 100 · IF · b(f)=1 · THEN · KEY · k, a \$ (f) + CHR \$ (13)

HACD 110 · IF · b(f) = 0 · THEN · KEY · k, a \$ (f)

BACP 120 · NEXT

CABM 130 · CLOSEIN

Music Maker

It's a musical keyboard, right, from Matthew Cox, and you can play little tunes on it! Wow! Fab! (You're fired. - Ed)

MCBC 1.MODE · 0:PEN · 1:BORDER · 14:INK · 0,14:CLS:PR INT:PRINT:"....Music-Maker":PRINT:PRINT ·"···By·Matthew·Cox":PRINT:PRINT·"···Pre ss.Enter.to":PRINT:INPUT.".....Start"

Height

In the same vein of text printing (You've really thought these out, haven't you? - Ed), we've got a rather nifty little routine from Mark Holmes of Devon that prints text in a variety of sizes on the screen. The program's pretty selfexplainatory, and it should be quite easy for you to incorporate the routine into your own programs (but remember to credit Mark).

FAKI 300.LOCATE.xp,yp+y-1 FAPC 310 PRINT CHR\$(247+y); IABF 30 · ' · For · Amstrad · Action · 1993 CANI 320 NEXT y DAPB 330 · xp=xp+1 IACN 60.SYMBOL.AFTER.256:SYMBOL.AFTER.32 CAIJ 350 RETURN

BANL 70 PEN 3 LADA 80·text\$="Quadruple·Height·text" FAPA 370.b=UNT(HIMEM+1729)

GAHP 90 xp=3:yp=1:h=4:G0SUB 260 44TA 188. · BAHO 110 PEN 2

JALO 120·text\$="Triple·Height·text" HABF 130 xp=3:yp=10:h=3:G0SUB 260

AAPO 140:: BAKO 150 PEN 1

AAJK 20 ·

AALK 40.

BALP 50 - MODE - 1

JAKN 160·text\$="Double·Height·text"

HAMN 10 · '· HEIGHT · - · By · Mark · Holmes

FAJF 2 · IF · a\$=" · " · THEN · GOTO · 19 GALG 3.IF.NOT.a\$=".".THEN.GOTO.19

FAOC 19-REM-Home-Organ

EAJP 20 · ON · BREAK · GOSUB · 410

BALP SO MODE : 1

CAJM 60 · BORDER · 14

CAKE 70 · INK · 0 . 14

HAII 80 · INK · 1, 26 : INK · 2, 0 : INK · 3, 13 : PEN · 3

GAJN 90 · ORIGIN · 0, 0, 8, 631, 16, 200 : CLG · 1 LAGE 100.MOVE.0,16:DRAW.639,16,3:MOVE.0,200:D

RAW-639,200

LALG 110.b\$="QWERTYUIOP@[":w\$=".ASDFGHJKL:;]" :p=1

FAOP 120-FOR - i = 8 - TO - 632 - STEP - 48 FAGL 130 · MOVE · i , 16 : DRAW · i , 200

NACF 140 · MOVE · i + 12,40 : TAG : PRINT · MID\$ (w\$,p,1); :TAGOFF:p=p+1

BAFP 150 NEXT

GAJB 160 · MOVE · 630 . 16 : DRAW · 630 . 200

MAPN 170.FOR.x=0.T0.11:IF.x=3.0R.x=6.0R.x=10. THEN - GOTO - 190

CAEP 180 - GOSUB - 380 BAJP 190 · NEXT

CANO 200 · GOSUB · 290

DAJB 210 · LOCATE · 1.1

KAED 220 REM · notes · are · in · range · 1 · to · 21

IALH 230 · k\$=INKEY\$: IF · k\$="" · THEN · GOTO · 230 IAHG 240 · k=ASC(k\$): IF · k>21 · THEN · GOTO · 230

HAGN 245 x=k-7:GOSUB 401:SOUND 1, px

CAGK 260 - GOTO - 230

BAAJ 270 END

KAFF 280 · REM · Subroutine · define · keys

KAPI 290 KEY DEF 67,0,1:KEY DEF 69,0,2:KEY DE F.59,0,3

KAAI 300 KEY DEF 60,0,4 KEY DEF 58,0,5 KEY DE F · 61,0,6

KAII 310 · KEY · DEF · 53, 1, 7 : KEY · DEF · 51, 1, 8 : KEY · DE F·52,1,9 LAHA 320 KEY DEF 43,0,10 KEY DEF 44,0,11 KEY

DEF-45,0,12 LACB 330 · KEY · DEF · 35,0,13 : KEY · DEF · 37,0,14 : KEY ·

DEF · 34,0,15 LAAC 340 KEY DEF . 36,0,16: KEY DEF . 27,0,17: KEY .

DEF - 29,0,18 LAHB 350 KEY DEF 28,0,19 KEY DEF 17,0,20 KEY

CABO 340 NEXT ch IABA 360 p=UNT(HIMEM+(ASC(ch\$)-32)*8+1) DACM 380.FOR.y=0.T0.7 DAGP 390 · FOR · z=1 · TO · h EAHH 400 · POKE · b , PEEK(p) CACB 410 · b=b+1 CAPI 420 NEXT z CAAD 430 · p=p+1 CAAJ 440 NEXT y CAJJ 450 · RETURN DEF - 19,0,21 CAJJ 360 · RETURN

JAHO 370 · REM · Subroutine · black · keys JAPI 380 ORIGIN 0,0, x*48+40, x*48+72, 94, 198:CL

G . 2 MACN 390 · MOUE · x * 48 + 48 , 120 : TAG : PRINT · MID \$ (b\$, x

+1,1);:TAGOFF

CAEJ 400 · RETURN FAMF 401.fx=440*2†((x-10)/12)

EAAB 402.px=125000/fx

CAHJ 403 · RETURN HAIB 410 · CALL · &BB00 : REM · RESET · KEYS

CAMH 420 · INK · 0, 26

DAKP 430 · KEY · 0, "list

AACC "

CAOH 440 · INK · 1,25

BAPP 450 - STOP

Lawnmower Simulator

Okay, enough of the nice short listings. This time. we've got two absolutely humungous programs by one Xen (we do have his real name, but believe be, Xen is better!?!). The first is an absolutely fab lawn mower simulator, and the second is a defend the planet type game. All instructions are included in the program, so without further ado, it's time to start a nailbreaking mammouth type-in sesh. We would like to point out, though, that Future Publishing takes no responsibility for anyone suffering exhaustion after typing these listings, or damage to cuticles in the process.

NAJJ 10. '. Professional Lawnmover · Simulator! ABKN 20.4.0.1993.by.XEN.(not.helped!).Levels.

by · XEN · and · Dutch HADI 30 · ' · Oh, · yeah · - · this · is · @&#\$!

LABB 40 · ' · Good · graphics · (not) · done · here

CANK 45 · RESTORE

GAII 50 · DEFINT · a - o : DEFINT · q - z EAIL 60 · ENT · -7, 7, 10, 1, 7, -10, 1

HAHO 70 · SYMBOL · 255, 24, 36, 36, 24, 22, 216, 48, 16

HAFJ 80 · SYMBOL · 254,60,36,66,66,66,126,255

- PAPL 650 x=dx:y=dy:z=level(x,y):IF · z>0 · AND · z< IAGB 90.SYMBOL.253.64.160.80.80.40.60.62.127 S.THEN.GOTO.710 GAMP 100 · SYMBOL · 252, 2, 5, 10, 10, 20, 60, 124
- HAKG 120 SYMBOL 250.8.40.32.40.8.40.32.40
- R\$(0) MANB 140 . MODE . 1: INK . 1, 24: INK . 0, 9: INK . 2, 3: BORD
- ER . 9: INK . 3, 18
- DA00 160 · 1\$=""+CHR\$(252)
- FAHC 180 -plant = CHR \$ (255)

- LAAM 210 PAPER 2: PRINT STRING\$ (40, plant\$); :PA PER . A
- NT.plant\$::PAPER.0:PRINT.STRING\$(38,".") ;:PAPER · 2:PRINT · plant\$;:PAPER · 0:NEXT
- KBAG 230 LOCATE 1.25 PAPER 2: PRINT STRING\$ (40 ,plant\$);:PAPER.0:plant\$=CHR\$(14)+CHR\$(2)+CHR\$(255)+CHR\$(14)+CHR\$(0)
- DAMH 240 · LOCATE · 10 . 10
- EBEC 250.WINDOW.#0,3,38,3,23:PRINT."..Profess ional·Lawnmower·Simulator·"
- BBPK 260 PRINT:PRINT. "You, ";r\$;", must cut al 1.the.long.grass":
- PAKM 270 PRINT . "without . hitting . anybody , . plan ts:nr"
- EAPO 280 · PRINT · "walls!"
- LANC 290 PRINT:PRINT"Controls are: ":PRINT
- EAPE 300 PRINT"Up ...: A
- EAMP 310 PRINT"Down : : · Z
- EACN 320 PRINT"Left :- · <
- MAND 340 PRINT: PRINT . "Or . joystick . (in . port . 0)
- LANH 350 PRINT: PRINT: "Press (SPACE) to play!"
- FACP 360 · IF · INKEY\$ <> " · " · THEN · 360
- GAEM 370 DIM · level (40, 25): MODE · 1
- KAEB 380 FOR a=1 TO 25: READ lev\$: FOR b=1 TO 4
- CBPL 390 · z=UAL(MID\$(lev\$,b,1)):level(b,a)=z:I F·z=0·THEN·count=count+1
- FADO 400 · IF · prev=z · THEN · 490
- DAJC 410 · prev=z
- EABO 420 · IF · z=0 · THEN · a\$=" · "
- GACM 430 · IF · z=1 · THEN · a \$= plant \$
- GAKM 440 · IF · z=2 · THEN · a \$= wallu \$
- GAIL 450 · IF · z=3 · THEN · a\$=walla\$
- FAFI 470 · IF · z=5 · THEN · a\$=sg\$
- LAML 480 · IF · z=6 · THEN · a\$=" · ":x=b:y=a:level(x,y) = Ø
- DAKC 490 · PRINT · a\$;
- OAHE 500 NEXT b, a:dir=0:cut=1:sc=sc+cut:p=100 /count
- GANF 510 · LOCATE · x , y : PRINT · 1 \$;
- DBPI 520 · LOCATE · 1,1:PRINT · "Score: "; sc:LOCATE · 28,1:PRINT."Done:";INT(cut*p);"%";
- FALH 530 · FOR · a=1 · TO · 100 : NEXT
- LABB 540 · IF · INKEY(71)>-1 · OR · INKEY(73)>-1 · THEN
- LAJB 550 · IF · INKEY(69)>-1 · OR · INKEY(72)>-1 · THEN .dir=2
- LADB 560 · IF · INKEY(31)>-1 · OR · INKEY(75)>-1 · THEN ·dir=3
- LAMB 570 · IF · INKEY(39)>-1 · OR · INKEY(74)>-1 · THEN ·dir=4
- EAJH 580 · SOUND · 2 . 3200 . 5 . 12
- IADE 590 · IF · dir=1 · THEN · dy=y+1 : dx=x
- IAOD 600 · IF · dir = 2 · THEN · du=u-1 : dx=x
- IAOD 610 · IF · dir=3 · THEN · dx=x+1:dy=y
- IACE 620 · IF · dir = 4 · THEN · dx = x 1 : dy = y
- FAKB 630 · IF · dir=0 · THEN · 520
- LABA 640 · LOCATE · x, y:level(x, y)=5:PRINT · sg\$;

- ABKB 660 · IF · z=0 · THEN · cut=cut+1:sc=sc+1:IF · cut =count · THEN · 780
- GAOM 680 · IF · dir=3 · THEN · PRINT · r\$
- GAKM 690 · IF · dir=4 · THEN · PRINT · 1\$ CAHK 700 - GOTO - 520
- BAKJ 710 · CLS
- LCGK 720 PRINT · "Well, · that · was · an · unfortunate ··accident.You.hit.something.and.it.da maged · yourblades, · sending · you · to · · the · · inhucen
- FAKN 730 PRINT . "working."
- NAIA 740 PRINT: PRINT: "Your score was: ":sc:PR
- BBBK 750 PRINT . "Which was: "; : PRINT . USING . "##. ###";cut*p;:PRINT."%":PRINT
- GACO 760 · PRINT · "Press · (SPACE)!"
- NABA 770 · IF · INKEY\$ <> " · " · THEN · 770 · ELSE · ERASE · 1 evel:GOTO·10
- KCOB 780 · CLS: PRINT · "Well · Done!! · · Your · · employ er · · is · · pleasedwith · the · work · you · have · · d one, ··and··hasgave·you·another·lawn·to·m ow!":GOT
- DAAF 790 · ' · Level · 1
- 1111111111
- 0000000001
- JAPH 830 DATA 1000200010000001000000000000010001 000020001
- JAKI 840 · DATA · 1000200011111001000000004010001 110020001
- JAPH 850 · DATA · 1000 200000000010000000000010000 000020001
- 100020000 JANK 870 DATA 100033333333001000000000010033 333330001
- 0000000001
- 0000000001
- 0000000001
- 0000000001
- JAAJ 920 DATA 1000111111100111110001111100111 111110001
- JABJ 930 · DATA · 1000111111110011111100011111100111 111110001
- 000020001
- JAGI 950 DATA 1000200000000000000000004000004 000020001
- 1 0000 2000 1
- 000020001 JAAJ 980 DATA 100020000000111111111111111110000
- 000020001 000020001
- JAAO 1000 DATA 100033333340000333333333000000
- 3333330001
- 0000000001 1111110001
- 00000000001
- 11111111111

- DAHJ 1050 · '·level·2
- KAJR 1060 DATA 333333333333332442333333333 3333333333
- 0000000002
- JAHM 1080 DATA 20020011111111111111111111111111111 11111110002
- 11000000002
- JAGL 1100 · DATA · 2002040000000011111111111114000 9000000000
- JAHX 1110 · DATA · 200200000000400000000000000000 00000000002
- JAAM 1120 · DATA · 2002000400001111111111111111111 1100004002
- JAHK 1130 · DATA · 2002000000010000000000000000000 9199999999
- JAML 1140 · DATA · 20020400000010111111111111111111 01000000002 JAML 1150 DATA 200200004000101440000000000001
- 0100040003 JAKL 1160 · DATA · 20020000000010111111111111111001
- 01000000004 JAKL 1170 · DATA · 2002000333301000000000000000001
- 01000000004
- 0100400003
- 0100000002 1100004002
- 2000000000
- 3333333002
- JAIK 1230 · DATA · 200000000000020000000200000000 2000000000 JAEL 1240 DATA 200000000200000020000000000111
- 1111110002
- 3333333002
- JAOL 1270 DATA 200200111001110011100111001110 0111110002
- JAPL 1280 DATA 200200111001110011100111001110 01111110002
- 20000000000
- 3333333333

10000000002

- DAHH 1310 · '·Level·3 3333333333
- 0000000002
- JABL 1340 · DATA · 20000000000000000000111111111110 10000000002
- JACL 1350 · DATA · 2001100110011001100110000000000 10000000002
- JAKL 1360 DATA 2001100110011001100110111111110 10000000002
- 10000000002 JAHL 1380 DATA 200001000000100000011111101111
- 0004000002
- JAHL 1400 · DATA · 20001111111111111111111000101010 JAMK 1410 · DATA · 20000000000010000000000000101010
- 0000040002 JAKL 1420 DATA 200004040000100004040000101010 9010000000
- JANL 1430 DATA 200000041111111104040000100010

- JADM 1440 DATA 200004040000100004040000111110
- JANL 1450 DATA 200004001110101110040000000000
- JAKE 1460 DATA 200004040000000004040000000000
- JAHL 1470 DATA 20000000040010040000000000000000
- JAIM 1480 DATA 20001111111111111111111000040004 0000040002
- 2000000000
- 0400040002 JAJM 1510 DATA 2011111111111111111111111111111111
- 11111111102 JALK 1520 · DATA · 200000100000100000100000100000
- 10000000002
- 0011100002
- 11000000042
- 0000400002
- 3333333333 DAAK 1570.'.Level .. 4
- KABC 1580 DATA 333333333333333244423333333
- 0011111112
- JAML 1600 DATA 211110000011111001111100111110 0000011112
- 0000001112 JAPK 1620 DATA 2110000000110000000000000000110
- 0000000112 JAKL 1630 DATA 21000000001101111110111111111110110
- JAHL 1640 DATA 210000000011011110000011110110 0000000012
- JAHL 1650 DATA 21000000000011100010041110000 0000000012
- 9000000000 JAGP 1670 · DATA · 203333333333010001151100010333
- JALN 1680 DATA 202111111112010011555110010211 1111111202
- JAKO 1690 DATA 202111111112014115555511010211
- 3333333302 JACL 1710 DATA 200000000000010001151100010000
- 0000000000
- JAAL 1730 DATA 200000000000011100010001110000 20000000000 JAML 1740 · DATA · 210000000011011114000011110110
- 00000000012 JANL 1750 DATA 210000000011011111101111110110
- JACL 1760 · DATA · 2100000000110000000000000000110 0000000012
- JAPL 1770 DATA 211000000011111001111000111110 0000000112 JAAM 1780 DATA 211000000011111001111000111110
- 0000001112
- 00001111112
- KAOB 1820 DATA 333333333333333244423333333

- 2222222222
- IAHP 10 · ' · Astroblast · (c) · 1993 · by · Xen
- KAMC 20. '. This program is PUBLIC DOMAIN
- HAFL 30 . ' · Give · it · to · ya · mates,
- NAFE 50.'.Don't.try.to.rip.it.off.as.your.own
- IADL 70.'.Send.me.a.tenner!.(Joke!)
- OAJN 80 · MODE · 1 : INK · 1, 26 : INK · 0, 0 : BORDER · 0 : PEN · 1:PRINT.CHR\$(23):CHR\$(1)
- OEOM 90.DATA."Asterblast",".", "Copyright.1993 ·by·XEN", "The ·Quargian · Splatish · Warriors ·have", "been ·waging ·war ·against · the ·plan et", "of · Grax · for · many · years · and · it · is", " your . job . as . chief . gunner . to . protect", "th e · dome · shield · which · has · been · made"
- FFKJ 100 DATA . "above the planets surface. You ·must·aim", "the·cursor, so·that·the·aster oid is", "within your sights and (I guote).'fire", "in a brash, adrenaline fuelled ·frenzy'", "until, ·it·is·obliterated! · It' s·as", "simple·as·that!", "But, ·how·long·c an·you·last?"
- KCIN 110.DATA.".", "Controls.are:-", "The.CURSO R·keys·with·COPY·TO·fire", "OR", "joystick
- OACB 130 READ a : IF a : "999" THEN 160 ELSE y=y -15: IF ·a \$=" · "THEN · 130
- OAJN 140 · x = 320 (8 * LEN(a \$)): TAG: PLOT 10, -10, 1: MOUE · x+2. y-2:PRINT · a \$: LAIB 150 PLOT-10, -10,3:MOUE x, y:PRINT a\$;:GOT
- DAGA 160 · CALL · &BB18
- PAHA 170 MODE 1: INK 1, 26: INK 0, 0: BORDER 0: PEN ·0:PRINT·CHR\$(23):CHR\$(0)
- KANP 180 DEFINT a-z:SYMBOL 255,195,129,0,0,0, 0.129.195 JAOK 190 DEG: MOVE - - 10, - 10: FOR - A = - 60 - TO - 60 - STE
- P.4 KABK 200.DRAW.(SIN(A)*600)+320,(COS(A)*600)-4 80,2:NEXT
- MAJE 210 · IF · PEEK(6) = 128 · THEN · GOTO · 750 · ELSE · MO VE . 0 . 0 : FILL . 2 NBGA 220 · SHIELDS=100:LASER=100:lv=lv+1:x=320: y=200:TAG:PLOT-10,-10,1:MOVE·x,y:PRINT·C
- HR\$(255)::TAGOFF:IF.LU=1.THEN.LU=2 MABP 230 DIM NEWX(LU), NEWY(LU), DIR(LU), OLDX(L
- U).OLDY(LU) MBGH 240 · FOR · A=1 · TO · LU : GOSUB · 550 : MOUE · newx(a) ,newy(a):DRAW·oldx(a),oldy(a),3:PLOT·new
- x(a), newy(a), 2:NEXT
- GACN 250 FOR A=0 TO LASER-1 STEP 2 GALJ 260 MOVE · A+96,0: DRAW · A+96,16,3 NAEH 270 MOVE 527-A,0:DRAW 527-A,16:NEXT:PRIN
- T · CHR\$(23); CHR\$(1) CBBN 280 PAPER 2:LOCATE 1,25:PRINT "Laser:":L OCATE · 34,25:PRINT · ":Shield";:TAG
- KAMP 290 · FOR · a = 1 · TO · lv : MOUE · newx(a) , newy(a) OALG 300.DRAW.oldx(a),oldy(a),3:PLOT.newx(a),
- newy(a),2 GAAF 310 · IF · sf = 1 · THEN · GOSUB · 610

HACO 340 · oldx(a) = oldx(a) + dir(a)

- HAGP 320 newx(a) = newx(a) + dir(a) GACE 330 · newu(a) = newu(a) -8
- GAOC 350 · oldy(a) = oldy(a) -8 MAGC 360 · IF · TEST(newx(a), newy(a))=2 · THEN · GOSU
- B · 640 PAFC 370 · IF · newx(a) > 639 · THEN · oldx(a) = oldx(a) -639:newx(a)=0
- PACC 380 · IF · newx(a) < 0 · THEN · newx(a) = 639 : oldx(a)=oldx(a)+639
- HAIC 390 · MOVE · newx(a), newy(a)

- OAMG 400 PLOT newx(a), newy(a), 2: DRAW oldx(a), oldy(a),3
- HAJL 410.NEXT.a;sf=0;zx=x;zy=y
- JADC 420 · IF · INKEY(0) > -1 · THEN · zy=y+12:mf=1
- JAIC 430 · IF · INKEY(2) > -1 · THEN · zy=y-12: mf=1
- JANC 440 · IF · INKEY(8) > -1 · THEN · zx=x-12:mf=1
- JAFC 450 · IF · INKEY(1) > -1 · THEN · zx=x+12:mf=1
- CCHD 460 · IF · INKEY(9)>-1 · AND · laser>1 · THEN · sf=1 :MOVE . 200, 0: DRAW . x+8, y-8, 3: MOVE . 440, 0: DR AW . x + 8, y - 8: DRAW . 440, 0, 3: MOVE . 200, 0: DRAW
- BBAK 470 · IF · mf = 1 · THEN · PLOT · 10 , 10 , 1 : MOVE · x , y :PRINT-CHR\$(255);:y=zy:x=zx
- EADK 480 · IF · x < 0 · THEN · x = 0
- FAKI 490 · IF · x > 639 · THEN · x = 639
- FAGG 500 · IF · y > 300 · THEN · y=300
- FANG 510 · IF · y < 160 · THEN · y=160
- MDDB 520 · IF · laser < 100 · THEN · ticker = ticker + 1 : IF ·ticker=20·THEN·laser=laser+2:ticker=0:T AGOFF:LOCATE 1,1:PRINT CHR\$(23);CHR\$(0): FOR.b=laser-6.TO.laser-2:MOVE.96+b.-2:DR AW . 96+b , 16 , 3: NEXT . b: MOVE-10 , -10: PRINT . CH
- R\$(23):CHR\$(1):TAG PADF 530 · IF · mf = 1 · THEN · PLOT · - 10 , - 10 , 1 : MOUE · x , y :PRINT - CHR\$(255);:mf=0
- CANK 540 GOTO 290
- FAPK 550·NEWX(A)=INT(RND*640)

EAIL 580.DIR(A)=DIR(A)*(-4)

- IAFH 560 NEWY(A)=400:DIR(A)=(INT(RND*3)-1) FADF 570 · IF · DIR(A) = 0 · THEN · 560
- MALF 590.OLDX(a)=NEWX(a)-(DIR(a)*10):OLDY(a)= NEWY(a)+80
- CAGJ 600 · RETURN PBPB 610 · IF · x (new x (a) AND · new x (a) (x + 16 · AND · y > n
- MAPA 620 · IF · hcount (1v * 5 · THEN · hcount = 0 : GOTO · 55
- KAHP 630 · ERASE · NEWX , NEWY , DIR , OLDX , OLDY : GOTO · 1 LCIM 640 TAGOFF: LOCATE - 1.1: shields = shields - 6:

PRINT · CHR\$(23); CHR\$(0): MOVE · 430+shields,

- R-1,-18:NEXT·b:MOVE-10,-10:PRINT·CHR\$(23
- LABE 650 · IF · shields < 1 · THEN · 670 · ELSE · TAG : GOTO · 550 OCJM 660 TAGOFF:LOCATE 1.1:01=laser:laser=las er-lv:PRINT·CHR\$(23);CHR\$(0):FOR·b=ol·TO ·laser·STEP-1:MOVE·96+b,-2:DRAW·96+b.18.

2:NEXT-b:MOVE-10,-10:PRINT-CHR\$(23);CHR\$

- (1):TAG:RETURN
- IFHD 680 DATA · "Oh · well, · you · done · your · duty · bu t·not", "well·enough. ·By·the·way, ·in·the· post-you", "will-get-a-court-summons-wher e·you·will","have·to·explain·how·the·who le", "population of the planet died.", "I.
- CBNL 690 DATA . "Press any key to play again!",
- ".", "You . scored", ".", "999" HAJK 700 y=399:PRINT CHR\$(23);CHR\$(1);
- BBNP 710.READ.a\$:IF.a\$="999"THEN.a\$=STR\$(sc): ef=1.ELSE.y=y-16:IF.a\$="."THEN.710
- MOVE ·x+2, y-2:PRINT ·a\$; NANB 730.PLOT-10,-10,3:MOUE.x,y:PRINT.a\$;:IF. ef=0·THEN·710
- OAFB 750 y=20:FOR x=0 TO 639 STEP 2:FOR zy=y-60 - TO - u+6 - STEP - 2
- MAEF 770 NEXT zy: MOVE x, 2: DRAW x, y: NEXT x: GOT

- HAAM 110 SYMBOL 251, 221, 0, 119, 0, 221, 0, 119, 0
- JAOP 670 LOCATE .x, y: IF .dir (3.THEN .PRINT .u\$ JAEH 130 - sg\$=CHR\$(14)+CHR\$(3)+" - "+CHR\$(14)+CH
- FAAJ 150 · u\$=""+CHR\$(254):d\$=u\$
- DAGP 170 ·r \$=""+CHR\$(253)
- IAON 190 man \$= CHR \$ (249) : walla \$= CHR \$ (251) FABC 200 · wallus=CHR\$ (250)
- OBMF 220 FOR a=2 TO 24:LOCATE 1,a:PAPER 2:PRI

- FAIC 330 PRINT"Right: -.>

- FAFO 460 · IF · z=4 · THEN · a \$=man \$

- ·dir=1

- July 1993 AMSTRAD ACTION

- 0000040004
- 00400000004
- 04000000002

- JAFL 1530 DATA 201110001010001010001010001010
- JALL 1540 DATA 200001110001110001110001110001
- 3333333333
- JALL 1610 DATA 211100000011111001111100111110
- 010000000012
- JACL 1660 DATA 20000000000011000111000110000
- 3333333302
- 1111111202 JAKP 1700 DATA 20333333333010011555110010333
- JADL 1720 DATA 200000000000011000111004110000 20000000000
- 0000000012
- 0000000112
- 0111111112

- HAKP 40 . '. Don't . change . my . code,
- FAHH 60 · ' · Don't · sell · it!
 - x+8,y-8,3:GOSUB-660
- ·in·port·0",".","Happy'Asterbalsting'"," .", "Press any key!", "999" CADA 120 · y=415
 - ewy(a)AND·newy(a)>y-16·THEN·hcount=hcoun 0 - 130 t+1:sc=sc+1.ELSE.RETHRN
 - - -2:FOR·b=0·TO-6·STEP-1:DRAWR·0,18,2:MOVE):CHR\$(1)

 - DANL 670 . MODE . 1: y=415
 - expect·you·to·make·a·full·written", "repo rt.by.tomorrow.
 - OANN 720 · x = 320 (8 * LEN(a\$)): TAG: PLOT-10, -10,1:
 - BBNG 740 FOR a=0 TO 1000:NEXT a: CALL &BB18:TA GOFF:PRINT-CHR\$(23);CHR\$(0);:RUN
 - LAKH 760 t=TEST(x,zy):IF t=2 THEN y=zy:zy=420
 - July 1993 AMSTRAD ACTION

Tutor Carial vial orial vial orial rutorial rutorial rutorial vial orial rutorial ru

They're back, and they're angry (or something). Tim **Norris and Simon Forrester** bring you part two of their writing adventures series.

Ah, there you are. And here we are. We're all here. That's great. If you missed last month's thrilling instalment you've only got a little catching up to do. We're writing an adventure game from scratch and last month we looked at plots and settings. So, if you weren't utterly baffled by the program, you should be ready to start thinking about moving on to the next bit.

Tell me what you see

We've got our setting sorted out and we've had something of a think about the map. Once you've roughed out the map to your satisfaction, you've got to start work on the room descriptions. What do these locations look like? What's there? What can you see?

The descriptions can be as long or as short as your program will allow, but they must help the player to get some sort of feeling for the game. As a rule, shorter is better - it's really annoving to have to wade through heaps of verbose description just to find out that it's an

Those rooms

1. You are in the launderette. You are

wall and doors to the south and east.

surrounded by split plastic seats and unhappy

people. The room smells of washing powder and

boredom. There are washing machines by the

2. You are in the street. Litter blows along the

road. There is a bus stop. The shelter looks a bit

3. You are on the bus. I hate buses. How do they

make them smell so disgusting? At least you can

look out of the window. Or you could if it wasn't

4. You are in the street outside your friend's

5. You are in another bit of grotty suburban

house. There's a blue door to the east and a bus

street. You can go east into a shop, or north into

steamed up. I hate buses. Mercifully, the journey

on the dodgy side but it looks like it might rain.

The door to the launderette is to the west.

doesn't last long.

stop to the west.

a launderette

empty room with a painting on the wall.

Some programs (though not ours) have the room description as a separate thing from the bit of the program that tells you where you are (you can tell I'm technically-minded, can't you?) What this means is that you can tell the player where they are - 'Bedroom' – and then give them a description of it - 'It's an utterly disgusting tip of a place. Dirty coffee mugs everywhere, bits of computer and motorbike all over the floor. It's an outrage. You can leave by going north, and maybe you should.' The program gives you the room description the first time you go into the room and only tells you agin if you ask it to. We're not going to do this because our adventure is so short. I'm just going to tack 'You're in your bedroom.' onto the front of the description and we'll have to read it every time we go in there.

Don't, whatever you do, include things in the descriptions that are to be used in the game. F'rinstance, we're going to need to find all the washing in the house and take it to the launderette. If, when we describe the bedroom, we mention that there's a pile of dirty clothes in the corner we're going to be a bit stuck. What happens when we've picked them up? Every time we go back to the bedroom the game will tell us

6. It's a washing powder shop. Despite there being over 250 different brands, they're all made by one of only two manufacturers. How bizarre. There's a nice looking person behind the counter. The only exit is west.

7. You're in your kitchen. Don't you ever do any washing up? This place is a disgrace. There's a hook by the door which is to the south.

8. You are in your bathroom. I hope your vaccinations are up to date. Domestos is NOT a Greek island and splashing it about a bit could save your life. The door is to the south.

9. More grotty old street. The sooner this whole place gets demolished, the better. You can go north, south, or east and you should do one of them really soon.

10. Out in the street. You close your front door behind you. Smell that suburban air. Foul, isn't it? You can go west or east (back to the house).

11. Your front hall looks a bit tidier than the rest of the house. You can go upstairs (east), north, south, or west. Blimey, what a choice.

there are some clothes there, even though we know we're carrying them. So things for the game are 'objects', the program deals with them differently and we'll talk about them later.

Something we've glossed over a bit is the fact that we're calling everything a 'room'. It's a kind of convention, really, and in our case stems from the fact that I can't be bothered to type 'location' over and over again. Somthing else that can't be overlooked is that everywhere your characters go has to be a location. If, for instance, it's possible to sit down at a desk and look at, say, a computer screen, it's easiest to have 'sitting at the desk' as a seperate room for the purposes of programming the game. In our game you have to travel by bus to your friend's house, so 'on the bus' has to be a room with its own description.

You can't beat the system

So, just go systematically through your map, writing a brief description of each location. Try, if you can, to be consistent with your style as you do it. I got a bit stumped when I was writing the descriptions for the laundry game because I wrote them over a few days. I found that the mood was completely different from one end of the map to the other. If it's a light-hearted game, try to adopt the same light-hearted tone throughout. Similarly if it's a dark, brooding,

- 12. The landing is a bit of a state, too. That skateboard looks a bit dangerous there at the top of the stairs. You can go north, south, or down the stairs (west)
- wait. What's this? There's a shop to the east. Or you can go north if you want.
- house, it could do with some tidying up. The exit
- 16. You're in your bedroom. It's an utterly disgusting tip of a place. Dirty coffee mugs everywhere, bits of computer and motorbike all over the floor. It's an outrage. You can leave by going north, and maybe you should.

See Map A →

Gothic piece, suddenly wibbling on about how dirty the curtains are and wouldn't this room look better with a nice clown mobile hanging from the lights is going to be something of a mood-killer.

A minor hassle I had with our descriptions was that the map is pretty much upside down. In plot terms you start in the bedroom (bottom right) and work your way clockwise around the map. But the room numbers run from the top-left. Bear in mind that you're leading the player through the game and try to write the room descriptions in the order the player will probably encounter them. The first pice of street I came to when I started to write was outside the launderette, but the player will first enter the street outside his/her house. So I wrote an exciting description of the street, it being my first, and then suddenly realized that my player would have been wandering round the streets for ages and would already have a pretty good idea what the streets looked like.

Anyway, enough of my yacking, let's get on with it. The room descriptions for The Great Laundry Adventure are in the program on the covertape and Simon will tell you all about it.

The techie bit

Cheers Tim. Right. Though room descriptions are important from the artistic point of view, they don't pose much of a problem on the programming front. The bit we're going to be tackling this month is the first part of the actual adventure program (cor - Ed). The part we'll be concentrating on this month is the parser. This is the bit of the program that takes the player's input, and attempts to work out what it means. Our parser is going to serve two main functions:

Separate the input into individual words

Act on those words

To speed things along a bit, and so you can see the whole thing in action, we're going to add descriptions and directional controls as well. So by the end of this episode, you should be able to wander around your little world. You can find the actual program on the first side of this month's

Street

Washing

Powder

Street

A bit of tidying up

It's getting to the point where the program is beginning to take shape. Already we've designed the map and worked out what all our rooms look like. We've started on the parser and pretty soon we'll be putting in our objects and puzzles

What we need to think about now is a little window dressing. We need to think about how the thing will look on the screen and what our players will see when they open the game for the first time

Clearly some sort of introduction is in order.

10 BORDER 0 20 THE D.D

up, and let's go through it bit by bit

The program

Lines 10 to 80 – Simple beginnings

These are the very simple first lines of the program, that set up inks, modes, etc, and display the opening piece of text. Line 80 just goes to the subroutine at line 300, so read on to find out what that does.

Lines 90 to 290 - The parser

Kitchen

Hall

Living

room

This is the main bit, the parser. Line 100 calls the routine at 440 which we'll take a look at later (suffice to say for now that it just prints the room

Lines 110 to 140 merely take the input in iS, and turn it into upper case.

Lines 150 to 220 separate the input into the separate words, which are stored in the dimensioned w\$ variable. The total number of words appears in the w variable. The routine works by going through the input character by character using MIDS, and attaching the character found onto the end of the current word

Friend's

house

Bathroon

Landing

Bedroon

30 INK 1.26

40 MODE 1

50 PRINT " You wake with a start. There's a bright light shining in your eyes. It feels like the sum. Oh no, it IS the sum. It's already late in the morning and you've got to get all the laundry done and get round to your friend's" 60 PRINT "house for lunch. You'd better get cracking, really..."

70 PRINT " You get dressed quickly and wonder what to do in that hapless kind of manner you have."

Obviously you'll think a lot more carefully about what you want to say to your players than we have, but you get the gist. Don't you? Oh, go on, say you do. Thanks.

covertage, straight after the database, so load it string. Every time it encounters a space, it starts on a new word string.

> It would have been wise, on reflection, to enter a little thing removing any trailing spaces from the front of the line, but bullet proofing a program is impractical at this stage.

> Lines 230 to 270 are merely IF statements, that jump off to the various command routines when they detect the word they want. Lines 300 to 430 - Setting up variables

This routines (referred to earlier) simply sets up all the variables used elsewhere in the program. As well as setting up w\$ (used by the parser), it does one other major task - reads off the room access codes. The way it works is very similar to the parser, in that it reads the number from the data statement, converts it into binary (to look at), and works through the string. If you remember from last time, the binary number could be guartered (literally), and each set of two bits indicate access in any particular direction. It's on one line purely to shorten the program. but you might like to try breaking it up a bit, for ease of understanding.

You can now feel good, because that was probably the only remotely mathematical thing we're likely to do in this program from now on. If you grasped it OK, then sit back, feel pleased. and relax.

Lines 440 to 660 - Room descriptions

This is simply the routine to display room descriptions. It simply reads off the rooms until it comes to the one it wants, and prints that. This does, in effect, mean that the printing slows down when you're in a room with a higher location number, but it's not really a noticeable change in speed, so don't worry.

The descriptions are all stored in the DATA statements at the end, by the way.

Lines 670 to 860 - On the move...

We discussed all this at great depth last month, so I'm not going to go into it in major depth again, suffice to say these are the routines to move you in the various directions,. All we've really added here is a little trap device to make sure the player can't walk through walls.

Next month we'll bung some objects in it.

- 13. Lawks a lordy, it's some more street. But
- 14. Well I'll be horn swoggled! It's a laundry bag shop, dedicated to the sale of jolly helpful laundry bags. What a good thing you stumbled upon it. There's a nice looking woman behind the counter. Or you can leave by going west.
- 15. Living rooms are funny old things, aren't they? This is yours and, like the rest of your is to the north.

Beageon

Send your letters to: Reaction, Amstrad Action, 30 Monmouth Street, Bath BA1 2BW

What the ...?

I am very distressed. Could you explain in full what PowerPage does, please? Also what the wotsits is clip art? Do PD libraries supply software usually on 3" discs or 3.5" disks? Finally, what it is that it is a firmware manual?

I'd be chunky grateful if you replied because I'm sure a lot of other CPC beginners want to know some of this.

Thanks tons

R S Plum Wallington

Well, R S, it's like this. PowerPage is a desktop publishing program. In the 1980s, people suddenly realised that they could use computers to lay out magazines and newspapers for them. A desktop publisher is the program that allows you to do this. It lets you put your text and graphics on the page in a sort of 'designed' way rather than the sort of 'printed out in a huge lump' way that a word processor would. I think it might be about time we did a DTP round-up.

Clip Art is the name given to the little icons and doodles and stuff that people sell for you to include in your DTP pages. There's a lot of it about and it comes in all shapes, sizes and flavours. You might need a picture of a footballer for your club newsletter, for instance. Instead of drawing one for yourself, someone's probably

already done one for you and you can buy it as clip art. It's usually sold on discs and comes grouped by subject.

The firmware manual is described in full in our 'Simply The Best' feature.

Crap Amiga games

- 1. Ever noticed how T2. Final Fight and the new Nigel Mansell are supposed to be really crap on the Amiga, but get high marks in the Amstrad reviews?
- 2. I'm waiting eagerly for SF2, but if they don't include a paddle option or at least two keyboard attack buttons, something nasty involving blunt scissors might be in someone's horoscope.
- 3. How about nagging some software houses to make Alien³ (also with paddle option)? Saliva drips from my blood-stained lips at the thought of
- 4. One question: I've been given three different versions of what WIMP stands for. What
- 5. Lastly, please keep us faithful readers up to date on the competition winners.

Paul Branney Carnoustie

1. Yes, we've noticed that too, P'raps Amiga iournos are just a miserable bunch of old stinkers. P'raps programmers make up for the lack of decent graphics and sound by making decent games instead.

- 2. The usual response from US Gold is 'in two to three weeks' but they say that every two to three weeks. It's actually the programmers fault, and you know what they're like.
- 3. Er. okay. Make an Amstrad version of Alien³ vou stinky softies, vou.
- 4. WIMP stands for Windows, Icons, Menus, Pointers. It was coined by Xerox who created the original WIMP interface. Everyone uses them now. Simon even wrote one for the CPC.

It might stand for something else. How about Watching Italians Make Pasta? Where Is My Pen? 5. Ooh, yes. Good point. We'll do that soon. We forgot.

You're crap

You're crap. AA's nothing like it was in the old days. The magazine's too short (60 pages? that's rubbish). You come from a crap Amiga magazine (I don't care what you say, Amigas are crap) and you don't know anything about computers, especially not the CPC. You're rude to everyone and you aren't even funny. The new logo's revolting and... (Snip. - Ed)

Fd Law Bristol

Thanks, Ed. Nothing's like it was in the old days

Simon's okay really

David got away quite lightly really... You should have seen what Simon does to the foolish people who criticize his work.

I was reading the latest issue of AA and noticed now, especially as your average readership has that a lot of people were unhappy with the covertage. I must say the first tape was a bit of a let down. So, fine, it had a word processor worth about twenty guid but what was the idea behind the chess game? I understand that many people may not have a word processor so it was right to put one on the tape, but surely it would have been a better move to put a decent game on the tape for all those that HAVE got one. Anyway, you seem to have made up for that by putting an excellent utility on the next tape (BooTracker) and two good games.

Another major gripe is the size of the magazine. I thought it was getting bigger after I saw an extra eight pages in AA91 but then it went back down to a measly 60 again. I would have thought that with the competition gone you would be able to attract more advertisers.

The 8-bits certainly seem to be in decline

just fallen to 27,000. However, I'd just like to make a few suggestions. I think the public domain column should be extended to by a couple of pages as most new software seems to be coming that way and I feel that it would be wise to put a few good pieces of PD software on the covertape every month as well.

Otherwise, everything is just fine. Simon Forrester's reviews are well written and the balance of the magazine is just right but I was wondering whether you would consider putting the following bits of software on the tape: a colour dump program and PowerPage 128. **David Crookes**

Thanks, David. We'll ponder the change in the PD column, I think you might be right. Oh, and and we're really sorry. Oh, and get stuffed.

Aussie Fanzine

Great mag! Love it. You are the saviour of the CPC. I was planning to upgrade my 6128 for a PC but then your mag brought me back to my senses. Thanks.

I am constantly reading in your Reaction section about how the CPC market is declining. Well spare a thought for us down Under. I know of only one company left in the country that still sells CPC games and that's why I'm writing to you. Since the games drought is so bad here I'd like to start an Australian fanzine and PD library – I don't think there are any at the moment, I've had a few good ideas for the mag but I won't be starting preparation until I know the prospective audience.

So, would you please print my name and address so that anyone who's interested in the idea could write to me and share their thoughts and opinions.

I look forward to hearing from all you Aussie users.

Brett Tippet 69 Racecourse Road Hevfield Victoria 3858 Australia

Sounds fab to us. Let us know how you get on.

ANSI C

I'm a complete beginner where computers are concerned and I should be grateful if you could answer the following questions:

1. My PC-owning brother says I can't program in ANSI C on my 'puny' 6128. Is this true? If not, where can I get the necessary software. 2. I love the freebie copy of Tasword. It's great for writing letters etc. (But this is hand-written. -Ed) My problem, however, is how to write mathematical symbols ($\sqrt{\text{ or }}$), etc) and powers (103, 104, etc) and also how do you do the Greek alphabet? (Like this: α , β , γ , δ . Just kidding. – Ed)

I think AA is the greatest and I eagerly await your reply. In the meantime, keep up the good work.

Janet Bailiff Nottingham

Thanks, Janet, we think you're the greatest too. 1. As for your brother, well he's almost right. You can't get ANSI C but you can get a version of C from HiSoft. Give them a call on 0525 718181. 2. Blimey, I dunno. Mathematical symbols and strategic bits of the Greek alphabet (I'm sorry, I didn't look too closely to see if it was all there) are in the second character set which you access by pressing CONTROL /. If you print stuff out, you can get powers by putting the power bit into 'Superscript' (on the printer options menu). This bungs the type up here like this but you don't see it on the screen.

Recycled German paper

The Classic Collection is a really great idea. At last I can start having some decent utilities on

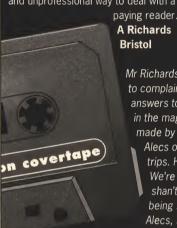
That covertape again

As a CPC 6128 user, I am going to make a suggestion that I believe will help both me and your mag. Did you notice that the disc tokens we send away to Ablex with our £2 (and no postage) is not good marketing for your mag? There can't be much in it for you at that price and we've had to pay for a tape we can't use. This is what I ask.

There was a large amount of space left on the Tasword disc. People are asking for the type-ins to be available to readers who want it in a more convenient form. I'm sure we will be

pay for the type-ins to be included on the disc version of the covertage and we could also be charged postage.

You replied to one letter that type-ins should, by their very nature, be typed in'. Not by me, time is money. That was an amateurish and unprofessional way to deal with a



A Richards

Mr Richards goes on to complain that the answers to letters in the mag are made by smart Alecs on ego trips. He's right. We're sorry. We shan't stop being smart Alecs, but we

are sorry about it.

But back to the meat of the matter. We offer the disc thing as a service and we do it at price we do because we love you. We're not, however, a software house and getting the type-ins compiled, duplicated and flogged on to you, the readers, would be more trouble,

Since the dawn of computer mags there have been type-ins and people have been satisfied to type them in. I've spoken to Rod (you remember Rod) and he tells me that he was subjected to a veritable barrage of abuse when he started putting 'ype-ins on the covertape from people who said it was a waste. We can't win.

expense and general aggravation that it would

he worth

This is your hobby, Mr Richards, and time isn't, in any sense at all, money. If you don't want to type them in, don't. No one's

In the time-honoured tradition of such things, correspondence on this matter is now closed. There shall be no type-ins on the covertapes (until we change our minds again).

disc for my 6128. I hope that this is one of the nicer remarks you get about the covertage. (It is,

Have any of you lot ever heard of a 5.25" disk drive for the CPC? A friend of mine had a C64 and like any foolish C64 owner he bought the wrong disks. There are 60-odd games on six disks, including some great oldies like Kung Fu Master, Codename Mat and even Tasword and Colossus Chess. If there aren't any 5.25" drives, where could we get the disks duplicated onto 3" discs - have you any idea?

I can't wait for the release of Street Fighter II so I can show all my SNES-owning friends that a CPC is as good (or better) than any Nintendo

And at last a winner of the GAC compo. I can't wait for next month for one of the best reads of all time - your mag is funnier, clearer and better set out than any PC mag my dad's ever bought.

Gotta go 'cos it's bed time. **Andrew Cranwell** Somewhere in Cambridgeshire

(Sorry, I couldn't understand your 90% re-cycled sticker. - Ed)

You don't make it entirely clear whether your

pal's software is for the CPC. If it is, how did (s)he get it onto 5.25" disks in the first place? If it's not, why do you want it? You won't be able to use it. Anyway, assuming you've got all that straight, there was never a CPC-specific 5.25" drive but, like 3.5" drives, you can use any of them – as long as you have the correct interface and other gubbins. So just find yourself a 5.25" drive and then check out any of the advertisers in the mag that sells drives and stuff and tell them what you're trying to do - they should be able to help. There are loads of bureaux that'll transfer disks of all sorts, but I'm still not certain if it would be worth your while - I still think your mate's files are C64 files that'll be no good to you.

I know this is going to make me unpopular, and I don't want to be seen to be raining on your parade or anything, but the CPC isn't a better games machine than the SNES. Sorry. As for SF2, well. It might be good, it might not. We'll iust have to wait and see.

Fund for everyone

I have been reading AA since issue one (So you're the one. - Ed) and have always thought it an enjoyable read, though now it seems to have

Fan Mail Corner

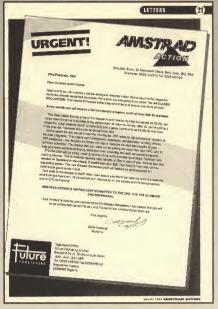
I collected the March issue of AA from the newsagent in Bendigo on 5th May which is a bit later than normal, but not much (it takes guite a while for things to get to the other side

When I got to page 21 and read Colin's letter, I couldn't believe it - I thought you were doing a great job, but now I'm lost for words.

From 1985 I bought all the magazines that were about the Amstrad, from ACU to CPC Attack, and I always had my eyes open for magazines with cover tapes, even when I had a disc drive. I started with a 664, but after five vears, the plastic sheet under the keyboard with the circuit on it that does all the work got a sickness and started to rot away - maybe it was my own fault for smoking while typing.

After getting a second-hand 464 and switching a few chips, I've got a 464 that thinks it's a 664, but that's all. The disc drive isn't going yet so I'm still looking for covertages. And I've been able to take it easy ever since AA started putting type-ins on the tape. (Oh dear. - Ed) which is a good thing when you're the wrong side of 60.

Coming back to the matter at hand, keep up the good work and keep your eyes open for



It's been nice talking to you, even if it was a little one sided

W Akkermans Neilborough, Australia

Gosh, W. what can I say? Sorry about the type-ins.

rather a morbid tone. (Ah, yes, well, you see Morbid Tone is a good friend of mine and we let him write for us from time to time. - Ed) It's obvious that with all this console mania going on that the 8-bits will eventually falter. But if we want to keep the CPC going strong for a while we should all put in an effort, which goes a bit further than buying AA every month. (Although that helps keep us in work. - Ed)

What the CPC needs to survive is a constant supply of quality new software, of which there seems to be something of a lack at the moment. How many people want DOSs? Music programs? These are about the only new programs floating around nowadays.

This is because the only new software around (good though it is) comes from enthusiasts and techie bods who do it primarily for love and not money. If only we could attract serious

commercial programmers who write programs that will generate the most revenue - games.

I must admit I too don't buy games, DOSs or music programs, but I do wish to support the CPC and encourage new talent to write all sorts of new software for it. As I was pondering what might be done, I hit upon the idea of a readers' fund, which could give awards for top quality programs such as Zap'T'Balls or whatever.

I know what you're going to say (Fishfingers. I bet you didn't expect me to say that. - Ed) but I would willingly give 10 or 20 pounds if I knew I was helping to create new quality software and I'm sure a lot of other readers would too. The fund could even be used to commission games or whatever from well-known authors.

There're all sorts of ways it might be done, but to discuss them here would be pointless unless AA decides it's worthwhile. Ask the

readers what they want.

Peter Hale Lewisham

PS Since Amstrad obviously doesn't care any more, how about giving programming details of the Plus Chips?

It's touching to be told that things aren't worth doing unless we say so, but I'm not entirely certain that's the case. I should have thought WACCI or the UAUG would be in a better position to administer the sort of fund you suggest. We're magazine and computer-types, not fund managers - we wouldn't know where to start.

What do the readers want, then? Does anyone else think it's a good idea? I'm not convinced, but I'd be interested to hear some opinions.

Oh, and 'morbid'? I prefer to think of us as 'realistically-resigned-to-the-way-of-the-world-butextremely-positive-and-jolly-nevertheless', but then I'm like that

Clean ver 'eads

I own a CPC 464 and my new games Golden Axe and Terminator 2 don't work. I don't know whether it's my computers fault or not. In Terminator 2 it either says error b or it loads a bit – until the colours start flashing – and then stops.

With Golden Axe it just says error b Could you find out if it's my computer's fault or the tape's fault and what error b means and what to do when it appears.

Alasdai Coll Caithness

Is your name really Alasdair? I bet it is. Error b is where the computer can't read the data from the tape. Sometimes it's because the tape heads are dirty, sometimes it's something wrong with the tape. So, first clean the heads on the tape player. Switch of the computer. Open the tape lid. Press play. Three lumps appear (from left to right, the erase head, the record/play head and the pinch roller and capstan). Put some methylated spirit on a cotton bud. Clean all three lumps thoroughly. Dry them with a dry cotton bud. Now try to load your games again. If they still don't work, it's probably something wrong with the tapes and you should take them back to where you got them from and get them replaced.

Just doing it

I thought I'd put finger to keyboard something else... I was overjoyed (464 Tasword, of course) and reply to your plea

for involvement in the comments on the future of the CPC.

I first had a 464 and a 6128 back in the early 1980s and I thought they were a step up the ladder from the Speccy and ZX81 (these being my introduction into the world of computing)

A computer with its own monitor (colour at that!) this was by this wonderful little machine. I must have spent hours upon hours messing about with this contraption until the early hours.

As time went on, I decided to part with my CPC for a quieter life Some time later I bought an Atari STFM but I found it difficult to get on with so I decided to buy a PC. I must admit I've enjoyed studying and working with the PC1640 but I decided recently to go back to

basics so I got hold of a 464 with green monitor and a stack of games for £65! I probably won't bother with the games much (except Scrabble) and use the machine for serious work. assembly/disassembly and general machine code study. I'd also like to start writing adventures again, when I get the right software.

I was more than surprised to read the comments in AA on the interest that's still around for the CPC. There's no doubt that it's a potent little machine and I, for one, never used it to its full potential

back in the '80s.

I hope your magazine continues to flourish and you get the full support you require for this wonderful little machine.

Keep up the good work, but please remember us mature persons when writing your articles, not too childish, please...

Melvyn Phillips

Thanks, Mel. Childish? Us? We'd love to stay and argue but it's time for our nap.

For Sale

AMSTRAD 6128 colour monitor, 464 keyboard, DD1, Multiface, Insider, Tape Recorder, Mini Office 2, Devpac, Maxam III, books, mags, games, disks, tapes, joy-sticks, £350 ono. Contact Sam, 16 Crocker Walk, Moston, Manchester M9 ING anytime.

CPC 464+ colour monitor, two joysticks and software, manual, only two months old, (quick sale) only £150.00 ono. Tel 0375 390623 or write to Clifford White 103 Seabrooke Rise, Grays, Essex

RM17 6DS.
CPC 464 colour monitor, Multiface 2,

CPC 464 colour monitor, Multiface 2, (under twelve months old), manual, user demo, 7 AA's and tapes, over £180 worth of software £250 ono. Buyer pays postage. Tel 0497 847476.
CPC 464 + 64K, Disk drive (manuals included) CPM22 printer lead, AA's 68-90 £200+ of software £359.99 of hardware. Sell for £350. Phone Ian 0892 517153

AMSTRAD DD1 inc Interface, Disk Box, 24 disks and Mini Office II, Disk £100, DK ronics 256K expansion £50. Phone Jochen in Germany 0104922514020.

Buyer pays postage.

AMSTRAD 6128 colour with tape recorder, mouse, 20+ magazines, 60+ tapes, 20+ disks, Mini Office II, Art Studio, both on disk. Phone Jessica 0707 262689 £300. Any reasonable offers.

AMSTRAD CPC 6128 sorry to all other sellers out there! £250+ of software and manuals (Soft 968!) and computer (sorry monitor, modulator supplied) for 29 bargain. Phone 0483 282350.

CPC 464 colour monitor, Quickiov jovstick manual, demo tape, 50 games including Robocop, Paperboy, £120. **Tel 0935**

822835 (Somerset). AMSTRAD 464+ for sale, mint condition. just 1 year old, over £150 software, Colour monitor only £250. Also OCP Art Studio £10, AMX Mouse £15. 464+ keyboard only £40. Tel 0209 218080.

£40. Tel 0209 218080.

ROMBO ROMBOX with Protext and Maxam 1 1/2 ROMS £40, AMX mouse and Stop Press DTP package £30. Phone 0271 24843 after 6pm.

MANUALS Soft 968 Firmware manual £8, Amstrad Advanced Users Guide £5, The Amstrad CP/M Plus £8, Amstrad Machine £3, CP/M 80 Programmers

Language £3, CP/M 80 Programmers Guide £8. Phone 0432 270329.

CPC 6128 (COLOUR) 3.5" drive, Brunword ROM, RS232, magazines, 256K, TV Tuner, Lightpen, Mouse, Lightpun, Books, Games/serious, PD, Stop Press, too much to list, Worth £1,300. Sell 9500 Phone 0793 531636 after 4pm.

CPC 464 colour 6128 Rom 64K memory expansion two 3" disk drives, Cruise Joystick, mouse, Stop-Press, tape and software manuals, books and more £375 ovno. Phone 0245 321514 after

AMSTRAD 6128 PLUS disk drive with colour monitor. Ten months from new, user instruction manual, disk games worth £100. Quick sell at £150. Please phone Michael 0443 204529 after 6pm. AMSTRAD 464 colour monitor, lots of soft-

ware (mostly games) plus many Amstrac Action magazines £165 ono. Phone 0734 334256 evenings/weekends.

DRIVE AWAY THESE OFFERS! For sale

Outrun Europa, Super Monaco GP, Supercars, originals on disk £6 each. Lords of Chaos on tape £3. **Tel** 0533

836453.

AMSTRAD 464 with green screen and MP1 TV modulator, loads of games, Multiface 2, magazines and cover tapes, will sell for £150. Phone 0980 624545 and

464+ COLOUR MONITOR, 64K Rampack, DK Tronics Lightpen, 2 joypads, cartridges £120 worth of software, 19 magazines, all boxed with manuals, might split, £300 plus P&P. Tel Dean 0253 770391.

COLOUR MONITOR, CWTA, ACU, AMTIX magazines, level 9 adventures and others, loads of games on tape, disk, from £1, Speech Synth, Elite, Chuck Yeagers, mono monitor, Sprites Alive, Stop Press. Tel Wayne 0532 572154

and black and white monitor. Will swap for Sega Megadrive or £150 ono. Tel Richard 0646 68922 (Pembroke). AMSTRAD 464 green screen, DD1, disk

drive, 64K Ram upgrade, MP2 Modulator, joystick 50+ games, plus serious software, Protext, Mini Office 2, Protype, excellent condition £250. Phone Mike 071 473

CPC 464 +64K disk drive, Rombo Protext, Maxam 1.5 Prospell, all on ROM, printer digital sampler, Amdrum, Midi mouse, interface, loads of software, AA's 20-85 worth £1500+ Sell for £350 ono. Tel 0749 674604. MONO CPC464, DD1-I drive, Multiface II, 64k expansion, 6128 ROM - Chip 6128 or 464 operation. Desktop Publishing (inc Mouse), Mini-Office II, CP/M and CP/M+ systems disks. Loads games £175 no Phone Steve 071 241 0662

SOFTWARE, twenty+ disk games, several tapes, including Kick Off II, Rambo III, Operation Wolf, ATlast +, Mastercalc, Mini Office II, Xybots, all disks £5.00 each/tapes £2.00. Phone Wayne 071 430 5615 9am - 4pm.

ROMS, Maxam 11/2, RODOS, Utopia, Romdos, Romdos +, all with original packing and instructions. Offers welcome e Wayne 071 430 5615 9am - 4pm COLOUR MONITOR CTM640 £60 swap for green or TV modulator £50 for modulator £40 for green screen. Wanted Battlefield, Germany, Sorcerlord, Firezone and pen pals any one preferably female from London age 16-25. Chris Palmer 257 The Hides, Harlow, Essex CM20

AMSTRAD CPC 464 with colour monitor £300 worth of games, mint condition. Games include Prince of Persia, WWF Wrestlemania, Bart V, Space Mutants, Outrun Europa etc. Bargain all for £320. Including Joystick 0265 832823 (N.

GAMES (50+ some on disk, mainly on cassette) from 50p, books (mainly for children), magazines (70+ editions of 'Computer Express', also CPC computing £30) DK Tronics speech synthesizer £20 Multiface 2+ £20 (speech includes 2 wat amplifier). Phone after 4pm (Giles) 0242

STAR TREK Fan club 'The Last Outpost' For free copy of 'Enterprise' Newsletter, just send 2nd class stamp to: 'The Last Outpost' (AA), 1 Blackdykes Terrace,

Falkland, Fife KY7 7BA.

GAMES FOR SALE, Original boxed with instructions, tape games for CPC. For a list and prices send SAE David Platt, 54 Fore Street, Buckfastleigh, South Devon.

DART scanner and DMP 3160 printer

together £110, Stop Press, Mouse, fonts, 600 graphics £75, too much to list here. Both packages for £170. For more

details phone 0296 431509. AMSTRAD 6128 keyboard, 33 games joystick, excellent condition, sell for £700 ono. Contact Akbar 081 521 8594 after

6.30pm.
AMSTRAD CPC 6128+ colour monitor, manual, AA mags, Disks, Paddle, cheetah, Bug, Joystick, Two years old. Excellent condition. Phone 061 428 1172 any day until 9pm. £180.00 the lot, buyer must

I WILL SELL YOU Spectrum ZX computer games for £1.50 each. Including over 150 games like Commando, Road Runner and Xenon or I'll sell you all of my games for £50. Tel 663 2045. Mayfield Dalrieth,

AMSTRAD 464+ and colour monitor, joystick, pad, also 50 games approx. Mostly top selling titles, magazines worth £50 also DTP packages, sell complete. also DTP packages, sell complete CPC 464, colour monitor, TV Tuner, clock/radio, 6128 chip, 3 + 3.5" drives, 64K memory expansion, Mutiface 2, Rom Box with Romdos XL 8 MS806 (6 months old) joystick, joypad, games and serious soft-ware £400 ono. will split. Tel

Bournemouth 0202 895429.
AMSTRAD CPC 6128 keyboard, monitor. games, manuals, tape recorder for 464. Games £200 ono. Also available: Desk TV modulator, alarm clock, non-separable £100 one. Cheat Mode 2 and back issues PROSPELL DICTIONARIES contains over 57,000 words, tested against 2 megabytes of text. Send £5, plus 2 3" o 3.5" inch disks. Make payable to:- B. Snell. 8 St Augustine Road. Southsea.

Portsmouth PO4 9AD.

AMSTRAD CPC 464 keyboard, colour mes, manuals, Multiface 2

AMSTRAD 464 plus colour monitor, keyboard, joypad, many games, Amstrad Action magazines in excellent condition £230 ono. Telephone 0266 44069 after

UNWANTED GAMES plus AA cover tapes and Amstrad Starter Pack, Tapes (23) games in total), bought with second hand 6128. Turbo Outrun, Sold a Million II, Skate or Die etc £15. James 081 449

CPC 6128 and mono monitor, Multiface 2+, tape deck, leads, manuals, both tape and disk games plus many magazines, £150 ono. Phone Matt on 0222 499087

AA 4 to 79 and 82, most tapes, very good condition, offers for all or part of the above. Phone Matt on 0222 499087 after 6pm.

AMSTRAD CPC disk games £3 each, 9 for £20. Tape games from 50p to £2. 16 for \$20 75 issues of Amstrad Action, some £10. Hampshire 0730 893777.

AMIGA A500 512K RAM, mouse, joystick software and disk box. All leads and TV modulator, included in bargain at only 9300 Tel 0706 842126.

AMSTRAD CPC 464 colour monitor and TV modulator, over 40 games and magazines plus joystick. £120 ono. Tel 0252

AMSTRAD CPC 464 with green screen monitor, joystick, £450 worth of software all originals, many magazines including cover tapes £150 ono. Contact 0642 597695 any time after 6pm ask for Peter.

AMSTRAD ACTION MAGAZINES

December 1987 until April 92 almost new. £1.30 each not sold separately. Software serious/games, tapes/disks. Cost Master X-press eg, Protext, Parroty Plus, Fleet Street Editor, Full list, Tel 041 778 6945. SEGA MASTER SYSTEM II for sale with Alex the Kid on Memory with control pad, and one Python joystick. All for £45. Call Alan on 0236 432908 after 4pm if possi-

AMSTRAD SUPER SALE! including hardware, software, magazines, games and two Amstrad computers. For a com-plete list send SAE to: 'Bradda' Crowborough Road, Georgeham, North

Devon EX33 1JZ.

CPC 6128 bargain colour monitor, disk drive, joystick and leads all in very good condition. All manuals boxed, tape and disk software £175. Phone 0708 741154

MINI OFFICE II two versions, both or cassette for CPC 464, 644 or 6128, cost £16 each, never used, £5 each. Phone Paul 0742 373973 (Sheffield).

AMSTRAD CPC 6128 with green screen monitor, joystick, various extension leads, Mini Office II, Amsoft Pascal, Dr Graph, Turbo Basic 30 disks with assorted utilities and tapes £195. Tel Colin 0635 872154. CPC 464 with colour monitor, Multiface II 100+ games, Azimuth, Footpedal and joy stick. Worth nearly £600. I will sell fo £350. Phone N. Ireland 02657 51505

evenings and ask for Daniel.

LOADS OF GAMES tapes from £2, disks from £4. All boxed with instructions. Over 00 titles. Write to Mark Coverdale, 30 Burnedge Fold Road, Grasscroft Oldham, Lancashire 0L4 4EE. Save on

HARDWARE FOR SALE: DK Tronics mouse, £20 worth £40. Teletext adaptor £25 worth £75. New boxed joysticks £10 each, light gun and games disk £10 worth £20. Call Richard 081 876 7032.

AMSTRAD CPC 464 computer complete with disk drive and built in tape deck. Also Multiface and over £500 worth of disk and tape software. Also includes colour moni-£300 ono. Tel 0706 817649.

CPC 464, colour monitor, 64K RAM expansion disk drive numerous games utilities (Brunword, Bonzo, Hackpack...) TV modulator (MP1), AA magazines, printer lead and original manuals, £250, includes ery in UK. Phone 081 591 2497.

CASIO CT-420 keyboard, 210 sound tone bank, 49 full size keys, stereo sound near ly new with power supply £120 ono. Contact 0642 597695 any time after 6pm

FOR SALE Outrun for CPC and CPC+ on tape. Phone 0256 762244 between 4pm

CPC 6128+ excellent condition, cartridges games (on disk), serious software disk), portable computer desk, old AA's, programming books, everything must be sold. Quick sale price. Suggestions welcome. Tel 0865 863177 ask for Brian.

SELECTION OF HOMEBREW software for the CPC's, 7 titles, prices from £1.50 to £3 plus tape/disk For a free information sheet send SAE to: A Swinbourne, Vicarage View, Redditch, Worcs B97

464 AMSTRAD KEYBOARD plus joystick £50, at least ten games plus Tasword word processor. Phone Daniel after 6pm anyday on 0256 51498.

6128+ with colour monitor and over 45 games, Multiface and two joysticks worth over £900 new. £150 one or swap for Amiga, All offers considered, Tel Alex 081

AMSTRAD CPC464 with TV modulator, well over 60 games including Chase HQ Hollywood Compilation manual included Can demonstrate will accept £90 one. Tel Desmond 081 863 2758 (Harrow).

AMSTRAD CPC 6128 disk drive, tape deck, 50 games, Multiface 2, colour monitor, joysticks £100, buyer collects. (Sheffield) 0742 697902.

TUCK PD - loads of PD software, non-PD software and hardware, (second-hand) For a list send a stamped sae to Tuck, 15 Ravencar n, Sheffield S31 9GJ.

Eckington, Sheffield S31 9GJ.

AMSTRAD CPC 6128 Plus with green monitor, joystick, manual, cassette leads, some disks £80. Amstrad module MP2, turns normal TV to colour or B/W monito

£30. Phone 0375 844991. CPC 464+ mono monitor, good condition complete with joypad, manual, some games, Epyx World of Sports on Cart, and Multiface 2. Call Tim 0543 506095 after

AMSTRAD CPC 464 with colour monitor speech system, manuals, introduction tapes, Multiface 2, over 130 top class games, Lightgun, 20 AA cover tapes (worth £400) a bargain at £110. **Phone** 0603 300903.

AMSTRAD CPC 464 colour monitor modulator, alarm radio, LC-20 printer complete with desk, 130+ games, AA mags, plus cover tapes and joystick. Excellent condition £295. **Tel 0765** 603799.

AMSTRAD ACTION magazines issue 52 -88, £1 each or £20 the lot, Wacci, Al. print out fanzines 50n each, 20 magazines of and CPC Attack £1 each. Phone

AMSTRAD 6128, colour monitor including tape player, OCP art studio with mouse, mat, holder, interface, 50+ magazines including cover tapes. Worth £647 sell for £250 ono. Phone Mike 0844 352883. GAMES FOR SALE on tape, ring for prices, Mini Office, Ghostbusters 2, Batman, After Burner 4, Soccer Sim, Gauntlet 2, Easi, Amsword, all for CPC

464. Contact Anthony 0553 673398. BUNDLE OF 42 GAMES on cassettes. All original, commercial, releases (no pirates homegrown). All original packaging. Must be worth £80! Yours for only £40! Buver takes all (evenings). **Tel 0442**

249409 DK TRONICS mouse interface and Genius mouse for just £20. Call Paul 0753 883898

AMSTRAD CPC 464 with green screen monitor, joystick plus games, only £60. Tel AMSTRAD CPC 464 colour monitor

DDI1, disk drive, 64K expansion, light-pen, Silicon drive, joysticks, utilities, games, manuals, magazines. Worth £60+ accept £350 ono. Tel 0235 525473. CPC 6128 colour monitor, firmware manual, DK light pen, 256K extra memory, print-

er, lead, Maxam /1/2, Protext on Rom, Rom programmer and Eraser Laser, Genius, Mini Office II, Rombo Rom box, oystick disks, games, books £250 ono. Tel Mark 0296 21595. 64K MEMORY EXPANSION and 64K silicon disk with manual £35, Multiface 2 plus manual £20, AA mags 1991 to 1992 in binders £20. Phone Bri 0425 477229

THE BEST IN MUSIC PD, Education Utilities, Send 50p SAE tape for both sides of the tape ! Simon Peters, 41 Bedford Road, Yeovil, Somerset, BA21 5UG.

AMSTRAD CPC 6128 with colour monitor and Commodore 64, £150 for both tape and disk Games include Hudson Hawk Rick Dangerous, Final Fight, Turrican and 2 and Shinobi. Phone Ben after 6pm 0303 872791.

CPC 6128 colour monitor good condition boxed with games instruction manual. Joystick worth over £400, selling for £160 one Phone 0483 277309 after 4pm.

CPC 464 colour monitor, disk drive, joy stick over 100 games, including Lazer Squad, Space Crusade, Prince of Persia £350 ono. Cash sale only buyer collects. Tel 0730 815305 after 8pm.

AMSTRAD CPC 464 colour monitor 20+ games, few AA mags and cover tapes, joy-stick manuals £135.00 onc. Phone any time Mark 0493 369 261 (Norfolk).

AMSTRAD 464+ computer, colour monitor, joysticks, Multiface, magazines magazines tor, joysticks, Miditales, Inagazines tape/cartridge games, worth £1200 accept £250 ono. Phillip Austin, 19 Melrose Way, Willows Estate, Grimsby, South Humberside DN37 9HZ, Buyer collects. AMSTRAD 464+ colour monitor 2 years old, joystick, manual 80 games, buyer collects £150. Tel Doncaster 0302 738635. SEGA MASTER SYSTEM with three games and joystick worth £155 now selling for £100. Tel. 021 554 9244

COMMODORE C64 with £50 games, will exchange for Amstrad DD1disk drive. Tel 0294 833838.

AMSTRAD 664 disk drive 128K memory, Interface, Multiface, tape recorder, loads of games and magazines gain at £200 If interested phone Jon 0242 233409 evenings or weekends.

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE, Y012 7EY IF YOU'RE IN THE SCARBOROUGH AREA, COME IN AND SEE US. OPEN: Mon-Sat 9.00am-5.30pm, Sun 10am-4pm. TEL: 0723 376586

AMSTRAD CASSETTES

3D TENNIS£2.99	GREEN BERET£2.50	RBI BASEBALL 2£2.99
ARMAGEDDON MAN£2.99	GREMLINS 2£2.99	RALLY SIMULATOR£2.50
BATMAN£2.50	JAHANGAR KHAN SQUASH	ST DRAGON£2.99
BOGGIT£0.99	£2.99	SHADOW DANCER/ALIEN STORM
BONANZA BROTHERS£2.99	JETSONS£3.99	£3.99
BUGSY£0.99	KICK OFF 2£3.99	SOOTY'S FUN WITH NUMBERS -
BULLY'S SPORTING DARTS .£3.75	LINE OF FIRE£2.99	UP TO 7 YEARS£8.50
CHUCKIE EGG£2.99	MERCS£2.99	SPELLBOUND DIZZY£3.75
DARKMAN£3.75	MINI OFFICE£2.99	SUPER MONACO G.P£2.99
DIZZY PRINCE OF YOLKFOLK	MIG 29£2.99	SWITCHBLADE£2.99
£3.75	MYTH£2.99	TERRORPODS£2.99
EDD THE DUCK£2.99	NARCO POLICE£2.99	THOMAS THE TANK ENGINE -
ESWAT£2.99	NINJA REMIX£2.99	FUN WITH WORDS
EUROPEAN SUPER LEAGUE .£2.99	NINJA SPIRIT£2.99	AGE UP TO 7£8.50
F15 STRIKE EAGLE£2.99	OBLITERATOR£2.99	TOTAL RECALL£2.99
FINAL FIGHT£2.99	OUTRUN EUROPA/G LOC£3.99	TRIVIAL PURSUIT£2.99
FIREMAN SAM£2.50	PIT FIGHTER£2.99	TURTLES COIN OP£2.99
FOOTBALL MANAGER 3 £4.99	PIT FIGHTER/SUPER SPACE	VENDETTA£2.99
FUN SCHOOL 4 UNDER 5'S£5.99	INVADERS£3.99	WEC LE MANS£2.99
GALAXY FORCE£2.99	PLATOON£2.99	X OUT£2.99
GHOSTBUSTERS 2£2.99	PLAYDAYS AGE 3-8£9.99	
GHOULS 'N' GHOSTS/TURBO	POTSWORTH & CO£3.99	TURTLES SPECIAL
OUTRUN£2.99	PREDATOR 2£2.99	TURTLES GAME + TURTLES
GRAPHIC ADVENTURE CREATOR.	PRO TENNIS TOUR£2.99	COMPUTER COLOURING BOOK
£3.99	PUZZNIC£2.99	- DOUBLE PACK£3.99

AMSTRAD DISKS

3D CONSTRUCTION KIT£10).99	PIT FIGHTER£6.9	9
ACTION FORCE£5	5.99	POP UP£6.9	9
A.D.A.M. ASSEMBLER		RODLAND£6.9	
+ DISASSEMBLER MONITOR£6	5.99	SAINT DRAGON£5.9	
BACK TO THE FUTURE 2+3£9	9.99	SCRABBLE DELUX PCW£6.9	
BATTLE OF THE BULGE£9	9.99	SHADOW DANCER/ALIEN STORM£9.9	9
BONANZA BROTHERS£5	5.99	SHADOW OF THE BEAST£5.9	9
CAPTAIN BLOOD£6	5.99	SIM CITY£9.9	9
CASH BOOK£5	5.99	SPACE CRUSADE£9.9	
CLUEDO£4	4.99	SPORTING TRIANGLES£4.9	
COLOSSUS CHESS£6	5.99	STEVE DAVIS SNOOKER PCW£5.9	9
COLOSSUS CHESS PCW£6	5.99	SUPER CARS£6.9	9
COLOSSUS BRIDGE PCW£6	5.99	SUPER OFF ROAD£3.9	
DALEY THOMPSON'S OLYMPIC CHALLENGE £9	9.99	SUPER SPACE INVADERS + PIT FIGHTER£9.9	9
DAN DARE III£5	5.99	SWITCHBLADE£9.9	9
DARK SCEPTRE£6	5.99	TAS SIGN£6.9	9
DISCOVERY (EDITOR, ASSEMBLER, MONITOR,		TETRIS £4.9	19
DISK NURSE, UTILITIES)£7		TURTLES£4.9	
DOUBLE DRAGON 3/RODLANDS£9	9.99	TURTLES COIN OP£7.9	9
EUROPEAN SUPER LEAGUE£5	5.99	WORLD CLASS RUGBY£7.9	9
F.16 + MANUAL£7			
FOOTBALL MANAGER + EXPANSION KIT£7	7.99	CAR RACING SPECIALS	
FOOTBALL MANAGER 3£7	7.99		
G-LOC£6		DOUBLE PACK 1£8.9	9
HERO QUEST£4	4.99	CISCO HEAT/POWER DRIFT	
1.S.S£6		DOUBLE PACK 2£10.9	19
LONEWOLF (ROLE PLAYING)£8		LOTUS ESPRIT/SUPER CARS	
LOTUS ESPRIT£6			
MERCS£7		KID SPECIALS	
MONOPOLY£4		SOOTY'S FUN WITH NUMBERS -	
MONTY PYTHON'S FLYING CIRCUS£4		UP TO 7 YEARS£8.9	0
MYTH£7		THOMAS THE TANK FUN WITH WORDS -	Y
NEW YORK WARRIORS£9		UP TO 7 YEARS£8.9	0
NIGEL MANSELL£8			
NINJA REMIX£6	5.99	BOTH FOR £15.0)()

CASSETTE COMPILATIONS

BUDGET CASSETTES - £1.99 EACH

3D PINBALL ARCADE TRIVIA QUIZ AUF WIEDERSEHEN MONTY BRAVE STARR CABAL COLOSSEUM DOUBLE DRAGON DOUBLE DRAGON II DYNAMITE DAN EUROPEAN SOCCER CHALLENGE FOOTBALLER OF THE YEAR

FORGOTTEN WORLDS GAME OVER II GARY LINEKER'S SLIPERSKILLS GRAHAM GOOCH MATCH CRICKET HAVOC (HELICOPTER SIMULATOR)

JIMMY'S SOCCER MANAGER KENNY DALGLISH SOCCER MANAGER LED STORM MARAUDER

SAMURAI TRILOGY SHARKEY'S MOLI SHINOBI

SIDE ARMS SKATEWARS STARSTRIKE 1 + 2 SUPER NUDGE TAG TEAM WRESTLING TROLL TURBO BOAT SIMULATOR

	C	9	M	PI	LA	T	10	S	- D	\prod	SI	<
AMPIC	NS					0 00	DADE	FORCE				

CA QQ

COMPILATI	
CHAMPIONS£9.99	I
JAHANGAR KHAN SQUASH/MAN UTD IN EUR	
GALACTIC GAMES£5.99	1
100M SLITHER/SPACE HOCKEY/PSYCHIC JUDO/	
EAD THROWING/METAMORPH MARATHON	
HIGH ENERGY£12.99	
NORTH + SOUTH/TIN TIN ON THE MOON/	
FIRE + FORGET/TEENAGE QUEEN/HOSTAGES	F
HOME ENTS CENTRE (PCW)£9.99	
BACKGAMMON/DARTS/DOMINOES/	
VIDEO CARD ARCADE/WORDSEARCH	S

EMLYN HUGHES ARCADE QUIZ/ AUDIOGENIC/HELTER SKELTER MEGA SPORTS

LOOPT COLLECTION

THE GAMES SUMMER EDITION/THE GAMES WINTER EDITION/SUMMER GAMES/SUMMER GAMES 2/WINTER GAMES

SOCCER SPECTACULAR. ...£9.99 WORLD CHAMPIONS PETER SHILTON'S HANDBALL MARADONA/ SOCCER SUPREMO/FOOTBALL MANAGER/ PETER BEARDSLEY'S INTERNATIONAL FOOTBALL NO EXIT.

MIDNIGHT RESISTANCE/NIGHTBREED GAMES + WORD PROCESSOR ... £6.99 EASI AMSWORD/ROLAND ON THE ROPES/ NIMAL, VEGETABLE, MINERAL/OH MUMMY HARRIER ATTACK/THE GALACTIC PLAGUE/ DLAND IN THE CAVES/SULTAN'S MAZE/TIMEMAN ONE THE COLLECTORS (FRENCH INSTRUCTIONS)..£14.99

/ITCHBLADE/LOTUS ESPRIT/GHOULS 'N' GHOSTS INTEGRAL (FRENCH INSTRUCTIONS) ... £14.00 TOYOTA CELICA GT/SUPER CARS

+ RETURN OF THE WITCH LORD

SWITCHBLADE.

ANY 5 OF THE FOLLOWING BACK TO THE FUTURE III GAMES FOR £5 MYSTICAL

BAT BLIP + INVADERS BLACK TIGER CLASSIC PUNTER CLASSIC TRAINER MAD BALLS MIDNIGHT RESISTANCE

(CASSETTE)

ROOM TEN TEENAGE QUEEN (S. POKER) THUNDERJAWS TIN TIN ON THE MOON WELLTRIS (3D TETRIS)

DOUBLE DRAGON/XENON/SILKWORM/GEMINI WING THE BIZ COIN OP HITS 2 .. DYNASTY WARS/NIN IA SPIRIT/VIGII ANTE/

EDITION 1.

GHOULS' N' GHOSTS/HAMMERFIST KIDS PACK 1...

SHADOW OF THE BEAST/SUPER CARS/

....£9.99

GX4000/6128+/464+ CARTRIDGES

CHASE HQ 2... .. SPECIAL PRICE £8.99 ...£15.99

> HANNA-BARBERA COLLECTION£4.99 TOP CAT IN BEVERLEY HILLS/YOGI'S GREAT ESCAPE/ JOYSTICK THUNDER ... HONG KONG PHOOEY/ RUFF AND REDY IN THE SPACE ADVENTURE

BIONIC NINJA

SKATE WARS/STUNT CAR RACER/ PRO TENNIS TOUR/ZOMBI/AFTER THE WAR/AMC .£4.99 TENGEN TRILOGY... £3.99 CYBERBALL/KLAX/ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS THE FUN FORCE ... £3.99 BARBARIAN II/OUT RUN/CALIFORNIA GAMES£5.99 THE COLLECTORS (FRENCH INSTRUCTIONS)£5.99 SHADOW OF THE BEAST/SUPER CARS/ SWITCHBLADE/LOTUS ESPRIT/GHOULS 'N' GHOST

POSTMAN PAT/POPEYE Q/SOOTY + SWEEP/ WOMBLES/SUPER TED/COUNT DUCKULA KIDS PACK 2.. INTEGRAL (FRENCH INSTRUCTIONS)£5.99 FIREMAN SAM/COUNT DUCKULA 2/POPEYE /POSTMAN PAT 2/HUXLEY PIG/BANGERS + MASH LOTUS ESPRIT/SUPER SCRAMBLE/TOYOTA CELICA G SUPER HEROES.....

DOUBLE DRAGON/R TYPE/

OPERATION WOLF/BATMAN

....£4.99 11 GAMES + WORD PROCESSOR ...£4.99 LAST NINJA 2/INDIANA JONES + THE LAST CRUSADE/ HANGMAN/FRUIT MACHINE/BRIDGE IT/FASI STRIDER 2/JAMES BOND THE SPY WHO LOVED ME. AMSWORD/ROLAND ON THE ROPES/ANIMAL VEGETABLE, MINERAL/OH MUMMY/HARRIER ATTACK/THE GALACTIC PLAGUE/ROLAND IN TH NOBI/NINJA WARRIORS/DYNAMITE DUX/ CAVES/SULTAN'S MAZE/TIMEMAN ONE DOUBLE DRAGON 2 SPORTS + SKILLS 5 . CHART ATTACK...

£9.99 .£5.99 WORLD SOCCER/FRUIT MACHINE/BATTLETANK/ SHADOW OF THE BEAST/SUPER CARS/LOTUS ESPRIT/ PARA ACADEMY IMPOSSOMOLE/GHOULS 'N' GHOSTS POPEYE COLLECTION £6.99 ..£2.99

POPEYE 1, 2 & 3 SPAGHETTI WESTERN/2088/NINJA COMMANDO/ POSTMAN PAT COLLECTION£6.99 POSTMAN PAT 1, 2 & 3

...£2.99 HYDROFOOI /LIGHTFORCE/EXELON

SUPER CARS

GINORMOUS PACK .. .£9.99

RED ARROWS/ARMY MOVES/GRID IRON 2/PRO MOUNTAIN BIKE SIMULATOR/BMX NINJA/RUGBY BOSS/EVERYONE'S A WALLY/SOCCER CHALLENGE/THE REAL STUNT EXPERTS/COMBAT ZONE/SOCCER BOSS/RUN FOR GOLD/DEAD OR ALIVE/TURBO BIKE/AUSTRALIAN RULES FOOTBALL/GUN BOAT/PUNCH JUDY/GAME OVER/RALLY DRIVER/STRIKE FORCE CORRE

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER. ORDERS UNDER £5.00 ADD 50p POSTAGE + PACKING. CHEQUES + POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES. PLEASE ALLOW 7 DAYS FOR DELIVERY. THIS IS ONLY A SMALL SAMPLE OF OUR GAMES - PLEASE CALL FOR FULL LISTS.

Campursoft ■ 041 554 4735

We set that nice young Simon to help you out of tight spots. Forrester to work checking out this new Protext enhancer from Campursoft.

So you've got Protext, and though it's a really nice little word processor and all, its output is still very much limited to the capabilities of your printer (around about four fonts, all of which look identical, and an ugly draft mode). This is where Campursoft saw the gap, and the need for a package that can allow Protext to be as proficient at printing as it is at word processing. Enter ProPrint. ProPrint is a package that intercepts any output directed toward the printer, and turns it from pages of boring straight text, into pages of lovely graphical fonts, at the touch of a button. The one thing to bear in mind here though is that you do need a copy of Protext before you can use ProPrint (obviously), so don't rush into buying this until you're sure you have

So how does it all work? Well, ProPrint comes in two main parts - the Protext patch, and the character designer. You don't have to design all your own fonts though, as the B side of the disc is stuffed to overflowing with loads and loads of different lettering styles.

The Protext patch part is the program that intercepts printer output, and actually makes use of the codes you insert, calling up different styles, graphics, etc. from the in-text control codes you use in Protext anyway.

One of the first things to look at on a package as technical as this is the manual. as there is virtually no on-screen help within the Protext text editor (except for the usual stuff), so a manual that tells you exactly what's going on, and when it should be going on is pretty much essential. Well, I'm pleased to say that the manual is very clearly written, with a lot of extra help, good ideas, and nice examples (which can also be found on the disc). As a nice addition, it also has a few little troubleshooting sections

The character designer (the part of the package you'll be using to create new styles of letters) is, to be frank, good. Gives a nice display of every character in that set, along with a normal and condensed image of the character you're working on at the time. Quite obviously, the designer is in black and white (your print out is as well), giving a nice high resolution to the lettering you're working on. Controlling the pointer is easy with cursor keys to move it, and the space bar to toggle a pixel. You may be misled, however - the resolution of the character you see on screen is not going to be the resolution you achieve on paper if you're using a 9-pin printer as opposed to a 24pin. When you reduce the number of dots per inch, etc, resolution obviously goes down. Fear not though - though 24-pin printers produce a wonderful print-out, 9pin printers still produce a quality of text that looks easily as good as it needs to.

Great - so you've got loads of new printer fonts. Fab. What use it that? Well. the printer fonts aren't just your average run-of-the-CPC stuff. They've got a much clearer and better representation on italics. subscript and superscript, as well as being of a slightly more artistic nature than the standard Epson stuff.

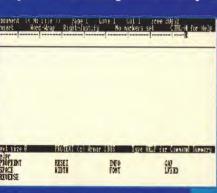
ProPrint also prints graphics. Yup, there's a nice variety of box edgings and the like to choose from, making your work look a hundred times better than the standard DMP printout stuff.

So how could a package like this help you? Well, think about it - if you're producing a fanzine, a news sheet, a notice, or the such, the ability to display several high quality fonts will allow you to create some really eye catching designs, giving your work a much more pleasing look.

Think of essays - schoolwork and the like. Instead of producing a slightly naff lump of printer font, you could switch between several styles for highlighting salient points, creating lists, etc.

To sum up, from what we've seen of Campursoft's ProPrint, it looks like it should Twot size 8 PROTERS (c) Broom 1985 Type HELP for Command Summary

This is the standard text editor bit. It looks really familiar, so nothing there to scare you



If you squint really hard you see the ProPrint commands at the bottom there

** FRO-PRIDAT v1.5 ** Standard 7 Bit Port Version 6193 Campursoft Written By C.Denyer Lap Retween Characters: 82

And, of course, there's always a bunch of information about to keep you well informed.

be a very nice package for two reasons. Firstly, it's serving a purpose that many people could find very useful in conjunction with Protext and secondly, it's a nicely written, easy to use, and incredibly powerful piece of work.

Next Month

Watch out next month for the final word on ProPrint, and a review of what could be its main rival, Sentinel Software's Pro-Ext.

Phone Simon 0734 341517.
CPC6128 COLOUR MONITOR, joystick, manual, 100+ games, TV Modulator, some AA's with cover tapes, excellent bargain, well looked after. Offers in the region of £300

Telephone Ryan on 0296 714479
AMSTRAD CPC 6128 colour monitor, joy-

stick, Mini Office II, C Compiler, Word pro-cessing software, games, perfect working order. £210 ono. Phone Rod on Bicester 0869 246462

BOOKS FOR SALE inc.The Amstrad CP/M Plus, Amstrad Advanced User Guide, The Amstrad Disk Companion. Phone for list 071 822 3727 ask for

Roger. CPC 464 UPGRADED TO 6128. Disk drive, Speech ROM, Light Pen, Multiface 2, Joystick, 100+ disks and cassettes, printer, magazines £290 ono. Phone 081 569 1338 and ask for Paul (evenings).

BLOB DODGER. Addictive Action Packed Game, 99 levels, CPC6128 only. Full instructions included. Send a blank 3/3.5" disk SSAF + £2 00 to A Ratcliffe Blob Dodger, 37 Parkland Grove, Ashford, Middx TW15 2JB.

AMSTRAD CPC464 + 64K+ Disk drive.

All software and manuals. Colour monitor Amstrad Action's AA68 to present. Many ton games titles inc Prince of Persia

Phone Ian after 4pm. 0892 517153.

AMSTRAD CPC464 Computer, colour monitor, 3D Construction Kit. Mini Office 2. Games, Joystick, Computable and chair £99.00 the lot! Worcester Park 081 330 3565.

6128 WITH COLOUR MONITOR 2160 printer digitiser, mouse, Stop Press, AMX Zircon cassette player, OCP Advanced Art C Compiler, Mini Office, Pandora Magazines, Games £500. Phone 0525 222552.

Advanced Art Studio (on tape) £9. Mini Office II (tape) £4, Dot Matrix printer 2160 £50. Phone 0480 860845. Also some

games - phone for details.
DISKS. BATTLE OF THE BULGE, Back to the Future, Edd The Duck, Boxing, Chess, Sorcery, Fun School 2, also games disks, £2 per disk or £25 for Total 16 disks Tel 0729 32995 16 disks. Tel 0722 322885.
AMSTRAD 464 COLOUR MONITOR and

Tel 0525 716239 and ask for Simon, 1

Tennyson Road, Flitwick, Bedford AMSTRAD CPC 6128 with colour moni-

tor, joystick, tape connection, Protext Masterfile, manuals £125.00.

Masterille, manuals £125,00.
Phone Andrew Lyon 051 531 9643.
AMSTRAD CPC664 DISK, colour Amstrad DMP1 printer, disks and manuals, Mini Office £160. Amstrad 464 colour tapes. Multiface 2, disk drive covers lots level 9 adventure tapes plus others. Sensible offers please. Tel S Scott,

0209 842094. AMSTRAD CPC464 for sale, Ideal for anyone in N. Ireland. Colour monitor, boxed, lightpen, 60 games, some new, I will deliver if in Ireland Excellent condition

will deliver if in Ireland. Excellent condition £150. Phone Timothy 0238 541716.

AMSTRAD CPC464. Complete with colour monitor, 2 joysticks, £300 worth of games, manuals, printer cable, boxed with 20+ magazines £175. Phone 0507 442780 after 5pm

AMSTRAD 664 COMPUTER Colour monitor, disk drive, tape player, joystick, Multiface, over 300 games on tape and disk. 80 magazines worth at least £3000 will sell for £200. Ring 0827 285990 after

POWER P.D. 25p per side. Games and serious utilities like Desk and demos like Face Hugger, Adventures also. Write for Richard Wild, 33 East Lane Sandiway, Northwich, Cheshire CW8

GREEN SCREEN MONITORS £15 Fach MP1 Modulator £8. 150 capacity disk box £2.50. L. T Roach, 18 Sutton Close, Elmfield, Rvde, Isle of Wight PO33

G.D.P.D. CASSETTE LIBRARY, largest Public Domain Library within the UK. 48 cassettes available. Send SAE for details to 18 Sutton Close, Elmfield, Ryde, Isle of Wight PO33 1DH. The ulti-

AMSTRAD ACTION magazines issues 52, 53, 60, 67 and 83, £1,50 each (price includes postage) or £6 for the lot. Phone
James 0256 880557

AMSTRAD COMPLITER Magazines January 1986-April 1986. £2.50 each or £10 for all 4. (price includes postage). Also January 1989, March 1989 - June 1989, Sept 1989 - December 1989, Jan 1990 - May 1990 and Oct & Nov 1991. Sell for £1.50 each or £18.00 for all.

Phone James on 0256 880557
COMPUTING WITH THE AMSTRAD
CPC magazines. Vol 1 No 9, Vol 2 No's 1,2,4,6 and Vol 4 no 8. Will sell for £1.50

each or £8 for all. **Phone James on 0256 880557.**

AMSTRAD CPC Second-hand games, hardware and extras. Prices 50p - £12. Hurry before they disappear! For list, send SAE to: John Harrington, 49 Silverlea Gardens, Horley, Surrey RH6

AMSTRAD CPC 464 computer, green screen monitor, joystick AA magazines and cover tapes and 20 games. Bargain £85. Phone 0243 672574 (Sussex).

CPC 6128, DMP 2000, Protext and spell on Rom, joysticks, software, AA 3 - 35, £300 ono. Tel 091 284 3633 (Newcastle) BARGAINI CPC 464 green screen, tons of games all in good condition. Excellent bargain at £100 ono. Excellent for first

time ouyer. Tel 0532 863774 after 5pm now! AMSTRAD 6128 with colour monitor

printer, second drive, all manuals, comes with Tasword Masterfile, Supercalc 2 plus games including Railway Sims. £300 ono. Phone Martin 021 459 8990. 6128 Monitor, 3.5" drive, disks, PD software, tape lead, printer lead, magazines, fanzines, tapes, joysticks, loads of games

etc, etc will split. For a price list write to Matthew Tuck, 15 Ravencar Road, Eckington, Sheffield. S31 9GJ.

BARGAINS £28 WORTH of old, good condition Amstrad mags. £15 onc. Also Amstrad Games including Chips Challenge £1 each + P&P for list. Phone Challenge £1 each + P&P for list. Phone Rob 0430 873007. 4pm-7pm Mon-Fri. AMSTRAD 6128, with connecting tape recorder, joystick, TV monitor, leads, manual and over 100 disks and tapes. Sell for £150 ono. Phone Malcolm on 0357

21470. CPC 464 green monitor, colour TV modulator, decent joystick, manual, 50+ games worth over £150. Various Dizzy's and

Amstrad Action magazines. 2 years old. Quick sale. £350 ono. Tel 0332 753925 AMSTRAD CPC 6128 colour monitor, AMSTHAD CPC 6128 colour monitor, tape-deck, Mini Office II and over £500 worth of games which are mostly disk v.g.c. £220 ono. Call Ben on 0622 672508 (Kent).

CPC 464 with colour monitor, joystick; 140

games inc mags, cheats, hints, tips, type-ins, every thing you want, excellent condi-tion £140. Phone 0382 541465. Wormit Fife. If it's far just come it's worth it

AMSTRAD CPC 464 with colour monitor needs slight attention, hence only £50.00, plus mountain of software, magazines and books. £50.00. Tel 0484 530918.

and books, £50.00. Tel u404 5005 to.

AMSTRAD CPC 6128 colour monitor.

DM printer, Multiface 2, 100+ games, cassette player £250. Phone Tony on 0255 850136 (answerphone).
BEEBUGSOFT programmers aid on disk

£12.00, Adventures, Bloodwich £10.00, Knight Orc £8.00, Lancelot £8.00, Painbird The Music System £8.00, Dark Side £8.00, Lords of Chaos £8.00, All original disks. Prices include P&P.
Tel 0293 517369.
AMSTRAD 464 with AA issues 77 to 82,

also ACU mags, various months. Also Cheat Mode 2 book with tapes and cover tapes. Comes with 350 games. Worth tapes. Comes with 350 games. Worth £1690. Price £100.00 Phone 081 851 2996. GAMES FOR SALE all originals, Batman The Movie, Pipe Mania, Castle Master, all tape each £3. Turbo Outrun, Dragon Spirit, (disk) £5 each. Iain Quijley, 14 Bute Court, Greenock, Invercivde, Strathclyde Scotland PA16 7AG

Strathclyde, Scotland PA16 7AG.
TAPE GAMES FOR SALE including
Manchester United £3. Shadow of The
Beast £6, Quattro Cartoon £3, James
Galea, 2 Pembroke Gardens, Woking,
Surrey GU22 7DR. SAE for full list, no

pirating!!
AMSTRAD CPC 464, colour monitor,
DDI-1, disk drive, 64K memory expansion, AMX mouse, Multiface II, CT1
£500+. Games tape and disk, 25 AA
magazines, worth well over £1000. Offers
around £250. Phone 0475 707808.

CPC 464 green screen, modulator, joy-stick, over 100 games. £200 or nearest offer. Also for sale, Master System II plus two games. Alex Kid, California Games £60. Contact Nick 0703 446830.

FOR SALE tape games, Barbarian II £2, Kung Fu Master £2, Fist of Fury £1.50, Venom £1.50, Bruce Lee or swap any 2 for Renegade 3. Contact Kirk 0703 437138.

BARGAIN Amstrad CPC6128 with colour Second disk drive £65 (+ 464 £15 Interface) Amstrad Actions 16 to 40 and binder) 10 disks + box tape recorder £100 of games all leads, instructions and boxes. The lot £375. Ring Alex 0684

GOOD HOME FOR ARNOLD, mono, joystick, printer lead, loads of software inc. Brunword ROM, GAC, Maxam, 3D model Universe and Games. Manuals and magazines £160 ono. Optional printer £200.

081 974 5171 CPC STUFF FOR SALE. Software, mags, books, also C64 stuff. SAE to Simon Welch, 15 Norcott Road, London N16 7BJ.

AMSTRAD CTM 644 colour monitor for CPC 6128 only £50, buy collects or pays postage. Call 081 7410478. CPC SOFTWARE, mags, books. Also Spectrum and C64 software SAE for list.

to Simon Welch, 15 Norcott Road, London N16 7BJ. AMSTRAD GAMES for sale £1- £8,

Terminator 2, Cartoon Collection, Lotus Challenge, Hard Drivin', Wild West Seymour, Silk Worm, Shinobi, NZ Story, Rambo 3, etc. Tape, Bug joystick.
Tel 0634 574007. Ask for Simon 5-10pm

weekdays. AMSTRAD 6128, colour monitor, Star NL-10 printer, Mini Office II, Brunword. Colossus Chess, Scrabble, Instant Recall, Stop Press, Spare Disks, Joystick, £300 onc. Tel (Romford) 0708 765166.

ono. Iel (Homford) 0708 765166. 6128 Colour Monitor, loads disk/tape games, joystick, lightpen, graphics, Mini Office, tuner and aerial, nearly all AA's, ACU's, tape deck, manuals/spares, offers around £225. Phone Alistair 0457

MULTIFACE \$15. Second 3" disk drive no power supply. (Hitachi) power split from monitor. All leads supplied, working order drive requires re-aligning £20.00 ono. swap either for MP3. Tel 091 3856053.

AMSTRAD 9512 Word processor, with sheet feeder, Database, extra disks and printer ribbon, £250 ono. Tel 0256 51538 after 7.30pm. LOADS OF AMSTRAD GAMES for sale

all cassette. Also Commodore 64 with tape deck. Games include Rainbow Islands, Turrican, Arnie and CJ USA £80. Islands, Turrican, Arnie and CJ USA £80. For list SAE to Ben Bradford, 17 St Anns Road, Dymchurch, Kent TN29 0PH. AMSTRAD CPC 464 with monitor, joystick, over 30 games including USA, TT wrestling and plenty of others. New one costs £300, this one £140. Good condition. Tel 041 424 1811 after 6pm

(Glasgow).
464+ No monitor, joypad, 3 carts, few tape games, few AA's, ACU's, and CPC attacks, covertapes. All £100+ postage ono. Call Jim on 051 547 2906.

SUPER SOCCER for the SNES for £25.
Also Superstars of Wrestling, Terminator 2 and Turtles 1. £45 will split. Phone 0256 880557 ask for Paul.

GX -4000 Including 3 games, Burning Rubber, Robocop 2 and Switchblade. (may split). All for £30 ono. Also for sale Maxam Assembler (disk) and Space Gun £20 may split. Phone 0256 880557 ask

JUSTICE: Two part adventure: You have escaped from prison to track down a killer, to gain true freedom. Homebrew £3 + tape/disk. A Swinbourne, 11 Vicarage View, Redditch, Worcs B97 4RF.
464 WITH COLOUR MONITOR, joystick

Books etc. Hundreds of games. Worth £1254.00 new. Sell for very reasonable offer or swap for Amiga 600 with software utilities, leads etc of same value. Tel 0942 865221 ask for Paul

BROTHER M-1009, 9 pin, dot Matrix printer, excellent condition. Includes original manual, printer lead, new ribbon, plus postage to anywhere in the UK, only £50 ono!! Call Robin Gilbert on 0656 740741.

D.K. TRONICS 256K memory expansion for 464 £50. CPM plus system disk £10. CPM 2.2 system disk £6, 6128 users manual £8, DD1 users manual £2.50. Telephone 021 358 5814.

AMSTRAD ACTION magazines number 16-88 £2 each most with cover tapes where applicable. Reduction for multiple orders. AA binders £4.50 each or £2.50 each with 12 issues of AA. Ken Dunn, 4 Nairn Way, Grimsby, South Humberside

6128+ very good condition, cartridges, serious/games disks. DMP2000 printer £300 ono. Also large amount of disk software £200 the lot ono. Will sell separately. Computer desk £50 ono. For details ring 0865 863177 8-10pm everything must be sold, ask for Brian

AMSTRAD CPC 6128 colour monitor Multiface II, tape and disk software, Mini Office 2, Money Manager, OCP Art, Scores of recent games and magazines. Bargain £175 ono. Phone David 081 979

AMSTRAD 464 with colour monitor disk drive, joystick and many games. Also Min Office II, manuals included, £200 ono. Phone Exeter 0392 438477. SEGA GAME GEAR for sale, almost new

addictive games only £115 ono. Tel A SELECTION OF SOFTWARE for the

Amstrad CPC/PLUS ranges. Cassette software only. Send SAE of 75 Nightingale Road, Edmonton, London N9 8PX for price list. Copies are origi-

nais. AMSTRAD 6128 original disks and manuals for Hisoft Pascal 80 £20. Oxford Pascal £10. Stop Press £20, AMX Max £10, Arnor C £20, Brainstorm £15. **Phone** 0432 270329.

0432 270329.

CPC 464 with colour monitor. Excellent condition. With printer, computer table, loads of games (very highly rated in Amstrad Action), manual, loads of Amstrad Action and mystery gift. £230 ono. Telephone 0271 74738.

ono. Telephone 0271 74738. CPC 464 with colour monitor, DD1 disk drive, 'Amstrad DMP160 printer, 60+ games, joystick, AA mags 45-90, ACU's and CPC Attacks, 14 x 3" disks. All for £275. Contact Keith on 0462 814172.

Caller collects.

ORIGINAL AMSTRAD DD-1. disk drive. complete with manual and all my disk based software £150. Contact Roland at 10. Dark Lane, Camelford, Cornwal

AMSTRAD CPC 464 colour monitor, joysticks, manual 200+ games (inc all Dizzies). 18 AA magazines with tapes. Excellent condition, worth over £1000. Accept £295 ono. Tel Richard on Norfolk 0842 761422

464 PLUS with green screen monitor and over 35 games, two on ROM, including Turbo the Tortoise, X-Out, Power Drift and Ghostbusters 2. Loadsa demos and blanks. All £399.99. Phone 0388 527965

CPC6128, Multiface II, Rombo Rombox, Rodos CP/M+, Protext, Promerge, Prospell, all on ROM, Devpac 80, Pascal 80, Mini Office, Money Manager, plus utilities soft-ware, firmware manual, plus much more. Offers. For details Tel 0733 311938. AMSTRAD CPC 464 colour monitor DD1

AMSTRAD CPC 464 colour monitor DD1 disk drive with Interface 64K RAM pack, Mini Office 2. 50 games complete with manuals, Amstrad Action mags £250 ono. Contact Dave (evenings) Ely 0353

CPC 464 COLOUR MONITOR, joystick, manual. Software includes some serious and some games. Total amount 100+ will accept £150 one. Contact David Bathbone on 0208 863645 CPC 6128 with colour monitor, external

cassette drive, over 130 games on cascassette drive, over 130 games on cassette a few on disk, lots of mags, including CPC manual £160. Tel 0502 515063.

AMSTRAD GAMES from 75p (originals) tape and disk, more than 170 games, all for £100 or sell singly. Phone Huddersfield 0484 512209 after 6pm

and ask for Hariit. AMSTRAD 6128 plus printer and data cassette, many games and utilities plus other software and all manuals £250 no

offers. 0892 548732. AMSTRAD 6128, green monitor 5.25" disk drive, datacorder, joystick, software inc, Dr Draw, New Word 2, Supercalc etc, some games, complete with Work Desk and all manuals £250. **Phone 0425**

modulator, lightgun, 150+ original games (tape and disk), loadsamags, manuals. Insured until 1994, perfect condition, worth over £800. Sell for only £220 ono.

0380 727277 evenings.
AMDRUM AND TAPE needs slight attention £5 ono, modern Prism 2000 £10 ono magazines, AA's, CWTA's, ACU's and CPCA's £1 each. Phone Locksheath 0489 583347 after 5pm.

AMSTRAD/SPECTRUM games for sale.
All brand new condition £'s off shop prices
also Amiga P.D. Software for sale. For a free list send SAE to 89 Wolverhamptor Road, Codsall, Wolverhampton WV8

CPC 464 with mono monitor and MP2 converter plus 81 games worth £110, AA mags 69,77,78,81,85,80. Also a book of

0982 4pm -9pm week days.
AMSTRAD CPC464 with colour monitor, 3 joysticks, 50 games, many number one titles. AA mags and cover tapes, £200. Tel Phil 0522 536402



CHARTS right here, right now • GAME REVIEWS pages 45-50 • CHEAT MODE pages 54-57

If it helps, you can think of these pages as a place where we review games like Prehistorik II, Darkman and Skull & Crossbones. Hold on, a moment, that's exactly what they are. Tch.



Tim Norris

Tim's been a bit disappointed by events this month. He likes to play a few games now and then but Simon (aka The Hairy Happening) bagged them all as soon as they arrived. So poor old Tim's been stuck doing ed-type things for four weeks with no excitement to brighten his days. By way of showing his displeasure he baked some delicious shortbread and didn't bring any in for the others. That'll teach 'em.



Simon Forrester

The Hairy Happening has been a bit bored by the usual round of going to gigs and leaping about a lot and decided to spend some time at home. But how do you get rid of your flat mates? Just fetch out a guitar, a big amplifier and loads of effects pedals and say things like "let's make some noise" and apparently they run for miles. You don't actually have to play anything - just look as if you might - and you get the place to yourself for a couple of hours. Bliss.



Nick Aspell

Nick decided he ought to do some exercise, what with it being summer and all, so he went out for a ride on his bike. He was astonished to find that. despite all the effort he put in, he wasn't losing any weight. Then he realized the awful truth, "It was all the flies and bugs I was accidentally eating as I rode along," said the revolted Art Ed. "But at least I've changed the photos."

Well his job's safe for another month, then.



CHARTS · GALLUP

Mini Office.......Alternative Super S/Invaders......H/Squad WWF WrestlemaniaH/Squad Trivial Pursuit 8 Terminator 2H/Squad Dizzy: Yolkfolk............C/Masters 🧣 Turbo The Tortoise......Alternative

..H/Squad

Reviewed this month PREHISTORIK II Page 46 SKULL AND CROSSBONES

Page 50



Simon dons his leopard skin caveman outfit, and goes clubbing it.

I've just bought a Wildhearts CD, you know. The music's really good, but I've got one problem with it. They've got a drummer called Bam Bam. That's right, Bam Bam. This is not something you call a child, 'And here's AA newie Bam Bam Forrester' - it just doesn't work. This is not a musician, it's a Flintstones character. (Oh no, I see a really tacky link coming up. - Ed) Speaking of the Flintstones, why is it that their cat (the one that kicks Fred out of the house in the ending sequence) never appears in the actual program? I lie awake at night thinking about this. (I lie awake wondering why Fred doesn't just go back in through the window like the cat did. – Ed)

Anyway, I loaded up Prehistorik II on a 6128 Plus (the game is slightly - emphasis on slightly different on the two machine ranges) purely for the extra effects, sound, etc. Like last month's Super Cauldron, the game opens up with a sequence of little arrows, etc, to align the



If you leave the joystick alone, Rik just stands around. Here, he's doing just that. July 1993 AMSTRAD ACTION

screen, select CRTC chips, etc. eliminating the problems that Zap'T'Balls had (the fact that the chances of it all working well on your machine are minimal).

Once you've dispensed with all the formal stuff, the title screen starts. Some beautifully blended colours create a prehistoric volcano. and lots of nicely drawn credit boxes belt round the place. In the background, there's a ripping little tune, with sampled guitars, a healthy bass

> line, and a nice drum beat. It's all in stereo, and beautifully arranged to make the most of the Pluses extra sound facilities. But that's just an intro

> > level opens with Prehistorik (imaginative name, huh?) standing around doing nothing. A strange bear-type thing claws

its way out of the ground, and ambles up towards you. A guick flick of the fire button, and Rik pulls a club from his leopard skins and thrashes the bear clean across the screen. This has set the pace for the rest of this game. Thrash the bad guys, and don't get eaten. If one of the other hungry residents of Hungerland does get their hands on you, you'll lose one of the



He could put his club through a bear's skull, but standing around is always much easier.



I've always hated spiders. It all stems from one eating my granny when I was younger.

three energy points that make up a life. You start with three lives, by the way. However, when you And into the game. The first do finally kill the wee beastie, his bones scatter about the place. Pick all these up, and you've got your energy point back. The various creatures have another use – by jumping on their heads, you can gain extra height in jump, also doubling the point bonus for squishing the thing afterwards.

> Add to the formula caves, passages, lifts, trap doors, moving floors, deadly spikes, sunset spells, mallets, battle axes, and a variety of other bits and pieces, and you've got Prehistorik II.

It must be the simplicity of this game that makes it so appealing – okay, you've got loads of different obstacles, bad guys, settings and locations, but in the end it's just a run-around-andcomplete-all-the-levels-'em-up. It's simple. It requires no seriously taxing brain work, just a good reflex or two, and a head for exploration.

The baddies you will come across are varied. There are bears (probably the most irritating of all your adversaries), tortoises (who just plod about the place), birds (they just flap slowly and lazily around the sky, waiting to eat someone), sabre toothed tigers (with a penchant for leaping), spiders (who occasionally get off their little silky threads and go for you), wasps (very



The one major thing to bear in mind when reading this review is that the game does play differently on a normal CPC than on a Plus. The differences are nothing major, and are more on various encouraging phrases (some of which the presentation side (a tune being slightly less impressive, and a few less colours), but the game plays just as well.

There is one feature on the normal CPC that

(for whatever reason), being the scrolling messages. You see, when you grab a load of fruit, etc, or when you knock off a particularly hefty bad guy, you'll get a huge faster message scrolling through the sky, giving are, to be honest, more than a little cheesy).

So if you've got a normal CPC, read this review anyway, and still consider buying the game – nothing changes but the presentation (which is still very good).

a detraction for a game. This can be overcome. as it doesn't make the game less playable, just more difficult – you have to be permanently on your guard - but isn't that what arcade games are all about anyway?

It's at around about this time of the review that I go on to talk about the various qualities (and otherwise) of a game (usually the one I'm reviewing). Which brings us round to the subject of graphics. And a problem - I can't find any faults! You see, the graphics are excellent. Not just good, but truly excellent. Rik is the height of cute, with some fabulously cartoony poses. The bad guys all move well, with no speed loss when the screen fills up with them. The sprites are huge on occasion, with absolutely no flicker as they move quickly and smoothly around the screen. The scrolling has to be seen to be believed. The screen moves effortlessly about, keeping up with Rik, with absolutely no problem.

Sonically, P2 is unsurpassed. The theme tune is outstanding, setting up that initial cute an bouncy theme that sticks throughout the game. Apparently, the music was created using an updated version of Soundtrakker (reviewed AA. 92), which has the capacity for using sampled instruments in tunes. The in-game tune is a little less impressive (perhaps that's just as well), and so doesn't intrude on the game playing at all.

There are several places on the common or

possibly say about dragonflies?), huge gorillas (as

The settings vary as well. From the star of the

game, which is based in a rocky kind of place.

theme makes for a more entertaining game, and

Of course, as with all games there are a few

through jungles, ice ages, etc. This variety in

a much better marker of progress than levels

things that lessen the mind rush of wonder a

margin. You see, there will be times when you'll

doesn't scroll quite well enough to allow you to

other faults though, this one does prove to be a

sometimes is to die in the process. This is only

Next fault, being bad guy regeneration. For

instance, you can run up to a bear, and waste it,

health points. This is no fun. It would have been a

any one place, and unforeseeable death is always

lot better to have only one baddie appearing in

occasional though, so don't end it all just yet.

but straight after, another bear could come

climbing out of the earth and take away vital

see what's below you, to drop onto it. Unlike

little irritating, as the only way to explore

little. One of these is a slightly small scroll

drop down onto a platform, but the screen

garden bird where you could fit a club...

dangerous), dragonflies (what can anyone

an end of level baddie), lizards (well, sort of

dinosaurs, really), and so much more.

themselves

Sound effects are beautifully balanced. Noises all blend nicely together, and clubswishing mingles nicely with baddie-dying. The one thing you absolutely must do when you get this game (you will get this game) is wear headphones while playing. The whole thing turns into a wonderful sonic experience.

Grab factor. Flashy intro sequences aside. when you start up this game, all you see is a bloke, a landscape, and a bear. Fab. Wow. It's when you move the blokey and club your first bear that things really get addictive. P2 has an instant appeal, that doesn't wear off.

You see, they've got the balance perfect with P2. Each time you play, you'll progress a little further, and each time you get a little further, you discover something new and exciting enough to make you come back for more time and time again. Also, you'll find yourself mastering the lower levels, and getting more and more proficient at wasting the bears, etc, with less scrapes.

So all in all, P2 is a well balanced,



It's a known fact that some trees sprout platforms. This one sprouts cavemen as well.

nicely presented game. On playing it, you'll get slightly irritated by the odd thing, but not enough to make you bin the disc, and certainly not enough to impair the game in any major way. It's nice to see that Elmar's subject material has matured slightly since Zap'T'Balls (slightly tatty).

What more can be said? It really is a great game, and well worth the price tag. It's been a while since we've seen many full pricers 'round these parts, but Super Cauldron and Prehistorik II more than make up for the drought. At the time of writing, Titus have not announced any more scheduled releases, but here's hoping we some more stuff from them fairly soon...

VERDICT

GRAPHICS

They're fab, but the normal CPC mode isn't quite as impressive as Super Cauldron, Fab nonetheless,

SONICS

The music is unbelievable, the sound effects are nicely created, and everything blends well.

GRAB FACTOR

From the moment you bring your club down onto that first bear's head, the game takes you over.

STAYING POWER If you liked Super Cauldron, or vou like console-style games, you

really should take a look.

Hit Squad # £3.99 # 061 832 6633

It's dark, and there's this man, you see - wearing black, with a long coat fluttering around his legs. That's right, it's Simon, and he's reviewing Darkman.

Revenge – A once proud man now lives a nightmare. Revenge – The explosion. They may have removed his face, but they couldn't remove his anger, Revenge – Durant, Strack, These are the men of greed. They have taken his manhood. they have even taken his beloved Julie. Now it is Darkman who will take - the lives of Durant. Strack, and all who follow them. The time for mercy has passed. Now is the time for Darkman. The time for revenge.

In short, Peyton Westlake is having a bad day. He woke up with a complexion like T1000, and now someone's stolen his girlfriend. Don't worry it's not a 'rescue the helpless bimbo' thang, she just thinks he's dead, that's all. He's had an acid facial, and not surprisingly, is a little riled by now. I feel a killing spree coming on..

Well, I would go on a bandaged mass murder special were it not for the fact that I've got to rewind to the start of side two and wait. And wait. And wait. But inevitably, the first level grinds into memory, and the curtains rise, Darkman,



Uh oh, Darkman. Look out for that pile of, er... And the bloke with the gun.

1993 AMSTRAD ACTION

standing centre stage. Enter blokes on either side, closing in and firing on Peyton. So you control the Darkster and rip their faces off, or something equally gruesome like that, You see. when you polish off yet another meaningless bad guy's life, they don't just vaporize. The Darkmeister punches them off their feet, until they slowly collapse to the floor. What fun!

If you've ever seen the film, you'll realise just how badly plotted this game is. Just about the only 'man in trenchcoat putting his fist through bad guy's face' sequences happen at the very end of the film, and don't last very long at that.

What we have seen here is the interpretation of a film that could have been made into a much more fun, challenging, varied and entertaining time - they managed it with Terminator 2. We could have had puzzle sub games based on Peyton's experiments, the famous synapse sequence, a static screen beat-'em-up for the opening plot sequence (in which Peyton gets frazzled), and as a grand finale, have that scrolling part, but with a few bullets spraying down, the odd ladder, and a few walkways. This would get an absolutely wonderful review from. me, and I'd probably feel suitably moved to give it a score somewhere in the nineties.

Sadly, the programmers didn't feel compelled to write anything other than a scrolling beat'emup, with very little else from the film. They did attempt to throw something together in the way of photographing people to imitate them, but if you even manage to find out how to use it, it'll be a small miracle. There are different stages, loosely based on the various scenes in the film very loosely. You see, when you blow up the lab, there's a small army of bad guys to get past (scrolling beat-'em-up section), when you climb to the roof top, there's a small army of bad guys to waste (scrolling bet'em-up section), and when you're jumping around roofs to avoid the helicopter, there's the evil henchmen trying to stop you (scrolling beat-'em-up section). What more can I say? It's a scrolling beat-'em-up game. Look, this is getting to be a real problem -



It's all very well having a game based on a film, but Darkman didn't really make much of an impression in the cinemas, did it? In case you haven't seen it, it's about a bloke (Peyton Westlake) who's working on a new workable synthetic skin. Bad guys

break into the lab, and smash it up, giving him an acid bath and napalm enema while they're about it. Peyton then completes the new skin, rebuilds nimself, and kills all the bad guys. Roll ending credits.



Darkman rushes to the rescue when a bad guy collapses with acute appendicitis



I'm sorry, but for the life of me I don't seem to remember any Ninia stars in the film

when AA is planned we set aside one page for each re-release, and two pages for something like Prehistorik II. In reviews like this, though, the system falls down. Planning a page for this review was okay, but we couldn't foresee Darkman being so mind-numbingly shallow that filling a page would be damned near impossible

Much as I hate to, I suppose I'd better treat Darkman as a normal game arriving for review, and do a little round up of its good points. There's no sprite flicker, and it's good fun killing people for about the first five minutes, until the novelty completely wears off. There. With a bit of luck, that should just about fill the page.

GRAPHICS

Not the best in the world, but not quite as much of a chunderama as Skull And Crossbones.

SONICS

The odd punching noise, but nothing special, or even vaguely interesting.

GRAB FACTOR

It's fun to punch the bad guys' lights out for a while

STAYING POWER Oh dear

It's not a difficult decision to make. You might like it, but then I'd lay money that you won't.

For Sale

AMSTRAD HOME PROGRAMMED computer software for sale. Games and serious software, tape/disk. For catalogue, send large SAE to Derek Payne, 89 Wolverhampton Volverhampton WV8 1PI

AMSTRAD CPC 464 with green monitor and joystick and over 40 games. £120 ono. Tel 0733 370386 after 6pm.

AMSTRAD 464 CPC games for sale, includes Seymour Goes to Hollywood, Rick Dangerous, Moon Walker, and many many more. Please send SAE for list. All budget games £1.50 others £3.00. Write to Paul Gillham, 83 Bridges Drive, Dartford, Kent DA1 5DR. AMSOFT TEACH YOURSELF Amstrad

Basic Part 2 with 2 cassettes £5 plus P&P, Usborne practical micro book, computer handbook, programming handbook £2.50 plus P&P each. The Working Amstrad Advanced Programming, £5 plus P&P each, mint condition 0733 238776.

DISK GAMES for sale! (all originals no instructions) TNT compilation 2 disks £8. Grandstand Compilation (2 disks) £8. Thunderjaws £4. Pictionary (French version) £3. Also some Spectrum disks rum disks. Phone Gavin/Callum 031 339 6644

AMSTRAD CPC 464, colour monitor, TV Tuner, Clock 1 radio 6128 chip, DDI-1 drive. Some software, desk, joystick £250 ono 3.5" drive for Amstrad CPC, Rombox, RomDos XL, MS800 £100 ono. Tel 0202 895429

CPC 6128 Datarecorder, RAM - music machine, stereo sound leads, 100's games, utilities, Dizzy's, Final Fight, Turbo Tortoise, etc...£195. 0206 393884 ask for Mr Rendell. Offers Considered.

CPC 6128 colour, loads of stuff, games, music things utilities £195 ono. Phone 0206 393884. Mr Rendell (Day).

AMSTRAD CPC 464 with colour monitor, CTM 640 and DMP 1 printer complete with approx 40 games on tane Reasonable offers. Phone 0344 25227 evenings only.

Ascot area.

AMSTRAD 464 games for sale. Including Agent XII, Klax and more. Prices from £1.00 - £3.45 on will swap. Send sae for list to Richard Wall, 35 Thornham Lane, Thornham Royton, Oldham 0L2 6UW.

Wanted

DD-1 DISK DRIVE in good condition. Also wanted FD-1 drive. Reasonable price paid.
Phone Keith on Scarborough 0723

WANTED DESPERATELY copy of 'Bards Tale' on disk or tape. Prefer disk, good price paid or will swap. Telephone Graeme 0887 820599 evenings or weekends.

SMALL NUMBER (3-4) blank CE-2 disks 3" cleaning disk and CPC 664 cassette and printer cables. RSVP ASAP A West. 2 F4/177 Shirley Road, Papatoetoe

DESPERATELY WANTED Amsoft Classic Racing or Multiface for CPC 464. Willing to swap DMP 3000. Please write or call on Andy Hudson, 5 Trocadero Court,

Normanton Road, Derby DE1 2GR.

SPECTRUM +3 computer. I will pay up to £25.00. Send details of your system to James, Three Ashes, Bramley Road, Slichester, Reading RG7 2LL and I'll get back to you (note: the computer must

DESPERATELY NEEDED, good working order printer with leads. Any make accept-ed but must be CPC 6128 compatible, Will pay up to £50. Phone Daniel 0256 51498 at 4pm until late.

DAMSEL IN DISTRESS seeks Hitch-

Hikers Guide, willing to pay (quite) hand-somely. Phone Lisa 0703 552348 after IRON LORD (English version) and BAT

disks. Swap Titus Fox and Robocop (disks) for one of the above. Phone Patrick 0661 853948 after 4pm and before 10pm please.
WANTED ON DISK, but tape is okay.

Lords of Midnight and Doomdarits Revenge, Plus Tau Ceti. Will pay reasonable prices. Contact Mike on Pewkridge 0785 714836 please help.

CAN ANY PERSON supply me with a copy of CP/M 2.2 on disk for DDI-1 disk drive. Will pay for disk postage and packing. Ring Steve 0604 499329 evenings.
PRINCE OF PERSIA WANTED (disk), will swap for Lemmings (disk) boxed with man-ual. No pirates! Phone Adam after 4pm

PRICE OF PERSIA WANTED will pay £6.50 or swap eight tape games and £2.00. Bargain. Tel 0742 368489 ask for Jeremy, we do not have an answering machine, disk only.
'ELITE' on disk wanted will pay any rea-

sonable price. Also wanted Arkanoid or Arkanoid II. Please phone Martin 0942 43702 or write to 55 Kenyon Road, Wigan, Lancs WN1 2DU.

SEEKING MANUAL with description of Ed. Com on CP/M. (for CPC6128) Price negotiable. Tel Gordon 031 667 1379. WANTED games for 6128 (disk), originals unnecessary. Reasonable price paid. Phone or write Antoinette O'Donnell

Spittal, Ballylanders, Co. Limerick, Ireland. 062 46719. USER MANUALS for the Amstrad CPC 464. Also hardware to fit a disk drive onto my 464. No silly prices please. Contact

Jim 041 336 6667. DISK MAP by Andrew Toner, December 1987 anyone have correct listing and/or used this? Amstrad graphics by Robert Ranson, Sigma Press disk required of complete programs. Phone 0934 623648. NORTH AND SOUTH will swap for Hero Quest (with Witchlord Data Disk), Must be on tape. Contact Michael Craig 28 Golfhill Drive, Alexandria, G83 9ER

TAPE PLAYER with lead urgently need-TAPE PLAYER with lead urgently needed. I will pay for tape player and postage. Also will swap F16 and Bloodwych for Lemmings or T2. Tel Sam 02657 41532. DO YOU REMEMBER a game called Little Computer People? Do you have a working original cassette copy for the 464? I will pay original price. Call Tony on 0922

SHADOW DANCER and Outrun wanted for three weeks. Will swap WWF and Liverpool for three weeks as well. On disk. Write to Stephen King, Dicksgrove, Currow, Killarney, Co. Kerry, Ireland.

OLD COPIES of Amstrad Action, num-

57035

bers 1-3, 5-8 must be in reasonable of tion. Cover price paid. Ring Cardiff 0222
795161 evenings only.
SIM CITY WANTED also penfriend, male

or female 12 years old. To give help and tips. Must be 6128 Plus owner (disk only). Mark Dolan Kilbrislane, Mitandstowd, Co Cork Ireland Tel 025 24133

PD SOFTWARE wanted on 3" or 3.5" disk for new PD Library. All disks returned asap. Sean Holland, 10 Pervin Road, Cosham, nr Portsmouth, Hampshire PO6 3DE.

SPELLBOUND DIZZY WANTED and Seymour (any except Take 1) swap for Dizzy Down The Rapids, Star Wars, and others. Send SAE to Jamie Shaw, 13

Carlton Close, Aylesbury, Bucks HP19 3HR or phone 0296 432764. PENFRIEND WANTED to swap/lend 464 games, tips etc. Only 464. I am 13 years old and looking for a 10-15 year old male r female. Gareth Gillibrand, 58 Ashley venue, Breightmet, Bolton BL2 5AR. Tel 0204 389732.

AMSOFT PASCAL introduction Hi-Soft 925 wanted. Phone 071 474 2869 after

HELP! Can anyone supply copies of pages 23 to 26 from OCP Art Studio instruction manual. Call Alex 0253 53024. WANTED AMX mouse to work or Amstrad CPC 6128. Call Peter 0734 478254 after 4.30pm.

DISK GAMES and Education disks wantod for young 6128 user. (7 years old). Call 061 928 6277
SWAP FOOTBALL MANAGER 3 and Kick

Off Collection for any football or sport sim.

Manchester United in Europe if possible.

Disk only. Phone Bill 0923 775637 any

afternoon except Sunday.

AMSTRAD CPC 6128 wanted or 664 computer only. Would consider machine with broken disk drive, cheap as possible please. Offers to Matt 0444 450454 will swap for MM12 monitor.

LEMMINGS wanted and Prince of Persia

(disk), will swap 2 or 3 tape games for each game 6128 only. Phone Thomas each game 6128 only. 0582 840670 after 6pm.

PENPAL WANTED I am a serious, non games playing 6128+ owner. I am 12 years old. Please write to John Danlels, 3d Kingsway, Gourock, Invercivde.

AMSTRAD 6128 green screen modulator. games, and light gun and joysticks, exchange for any Amiga 1 meg and screen etc.Person wanting Amstrad must collect.

D I Unsworth, 15 Anlline Street, Chorley, Lancs.

JACK NICKLAUS GOLF tape wanted desperately CPC 464, Reasonable price paid Phone Colin 091 4551379

NIGHTMARE DDI-1, can anyone supply CP/M 2.2 system utilities disk please Brother put mine in the toaster! All costs re-imbursed. Tel 0296 20861 answer machine

Other

MPD SOFTWARE over 130 selections of quality Public Domain software. For a free catalogue send a 24p stamp to Martin Elliott, 23 Nobes Avenue, Bridgemary, Gosport, Hampshire PO13 0HS.

MFH PD over 100 selections of PD soft-ware at 50p per side. Send SAE to Michael Harvey, 9 Gwernant Road, Cheltenham, GL51 5HP for a free cata-

logue. PD AT GREAT PRICES! Just send SSAE to Power House PD, 5 Pentland Road, Slough, Berks SL2 1TL. 50p per selec-

AM-COM the coolest Amstrad games Fanzine. Including news, reviews and competitions. May issue now on sale. Send a postal order for £1.80 to Gary Lewis, 20 Lancaster Terrace, Chester-Le-Street
Co. Durham, DH3 3NW for your copy.

MADI Wacky Fanzine for CPC owners.
Issue one out nowl Only £1. Send SAE to
Richard Tamblyn, 145 Stubbington
Avenue, North End, Portsmouth, Hants,

Avenue, North End, Portsmouth, Hants, PO2 0JQ.
WACCI. The UK's only serious CPC magazine. For a sample copy send just one 28p stamp to WACCI, 7 Brunswood Green, Hawarden, Deeside, Clywd CH5 3JA.
CPC LISTINGS lots of them on 3" disk.

Mostly games and graphics, some from 1985, for £3.00 only. From Angela Allum. 22 Point Royal, Bracknell RG12 7HH.



O I	R I	D,	E	R	F	O I	R	M

SEND TO AA SMALL ADS, AD PRODUCTION, FUTURE PUBLISHING LTD, BEAUFORD COURT, 30 MONMOUTH STREET, BATH, AVON BA1 2BW

Please place the following advertisement in the next available issue of Amstrad Action

Address		It's true - in Amstr part of o	FREE READER A from now on yeard Action for No ur continuing ef vith the best value possible.	ADS! Du can advertise OTHING! It's all forts to provide ue magazine
Classification. Tick box:	☐ Wanted	Services	User Groups	Other
			,	//
	•			

Write your advertisement here, one word per box. Include your name and phone number if you want them printed.

Hit Squad 061 832 6633 £3.99

Gather round mateys, and let Simon, Son of Forrester, the Master Swordsman, and dog of the highest seas tell you of the places he's been, the faces he's seen, the armies he's slain, and the re-releases he's reviewed (doobedoo).

I think before we go any further into this review, I should mention something. People with no taste for colour shouldn't be allowed to design graphics for computer games - S&C looks hideous. I know that graphics shouldn't affect gameplay, but I draw the line here. Anyway, let's resume as normal.

Ooh ar me 'arties! Avast and astern! Land lubbers, etc. It be a game about sailing the oigh seas! Ooh arr yeah. So there's you, along with One Eye and Red Dog on a voyage to recover your treasure from an evil sorcerer. So off you stomp around ships, harbours, and planks and stab people with your sword.

You run onto the first level, sword drawn, dive into the swarming crowd of pirates, and begin hacking and slaying. The incredibly chivalrous

pirates attack you one at a time (just like in all the best Errol Flynn films). Bumping off the bad guys (complete with head scarves) is a straightforward task that you could get the knack of in no time at all,



Yes, yes, yes. That's all very swashbuckling, but will the damn game ever finish loading? so all that's left is collecting treasure, following ghosts, and being beaten up by salty sea-dogs.

And off we trot through level upon level of swashbuckling action, with our valiant hero (or heroine) defeating armies of people in strange blue hats. The one thing you will notice here, though, is the fact that they are separate levels. They take ages to load, you see. It's the second of this month's multi-loaders. Which means that all the sword swishing flitters away into the background compared with the cold steel feeling

in your stomach when you see the words PRESS PLAY ON TAPE. When I first loaded it. I expected it to be a fairly mediocre platformy killing thing. When it loaded, and the screen scrolled painfully about. I reached for the power switch thinking 'I'm really not in the mood today.' but for some reason I carried on. And though it takes

This is where we find that vital lesson in gameplay - the loveliest graphics in the world won't automatically make a good game. Take Death Chase (on the Speccy) - it's got all the beauty of a dirty anorak, but it's unbelievably addictive. I think we can draw a similar conclusion here, really, except that the graphics aren't all that bad. They've just got some of the most garish colours the rainbow has to offer.

an age to load, it really is quite fun

Sonics. Oh dear. You'd expect them to be passable. You'd expect them to be there. Bad luck - they're not. It seems incredible that someone would ever release a game in this day and age with absolutely no sound effects, but they have. Make of this what you may. I'm speechless. (Hurrah. - Ed) If we had a picture of me looking aghast, it'd be here somewhere.



Another chivalrous pirate attack



A solitary pirate ambles up. a feeling of boredom runs, like icicles, down our spine

And as for gameplay and grab factor, well... Skull & Crossbones is not what it appears to be. As far as grabbing goes, S&C weakly paws at you, and gives up dejectedly. But if you do manage to hold the contents of your stomach long enough to see a bit more of the game, you'll find it's really quite good fun. Granted, you probably won't be playing it for months and months, but for a budget re-release, you should be quite pleased with your buy.

GRAPHICS

Moderate graphics, with bile inducing colours that may or may not turn you right off.



There's no sound, but if there was, you'd probably have to turn it down, so maybe it's a blessing.

GRAB FACTOR



STAYING POWER

I think the less said the better...

It's creepy! You will actually notice vourself having rather a good time, but hey, weird world.

All in all it's been a strange day. I think I'll lie down for a bit now.

The Company that is NUMBER ONE for CPC & PCW 3.5" disc drives brings you . . .

EVERY DRIVE YOU'LL EVER NEED

The ABBA switch, as its name implies, logically switches your drives around so that your A drive becomes the B drive and your B drive becomes the A drive. You can then use your external 3.5" drive as your A drive. Available for 6128/664 only.

3rd Drive Switch

The 3rd drive switch sits on the disc drive port and allows the use of two external drives, normally B drives. When used in conjunction with the ABBA switch the two external drives become A drives. Available for 6128/664 only.

Side Select Switch

The side select switch allows the use of side A and side B on your 3.5" discs. The kit comes complete with full fitting instructions and is suitable for any make of disc drive.

6128 ROM £24.95

The 6128 ROM upgrade allows the use of CP/M Plus operating system and features some extra BASIC commands. It will also allow the use of 6128 only software. It comes with full fitting instructions Some delicate soldering may be required.

Dk Tronics RAM Pack £39.95

The single plug in memory expansion pack features some extra BASIC commands, and bank switching software for use as a data bank. The bank switching is done automatically and is ideal for use with CP/M 2.2 and CP/M Plus with the 6128 ROM fitted. Expands your 64K RAM to 128K RAM, and brings your 464 up to 6128 capacity. Will work straight off. Plus machines require a Plus to Edge (Widget) connector.

Plus to Edge connector allows standard 61288 peripherals to be connected to the 464/6128 Plus

3.5" MEGA-DRIVE

(Including FREE MS800) only £69.95

The Mega Drive will format up to 800K per disc when used with MS800 (supplied FREE), RAMDOS, ROM-DOS or RODOS. It is a DUAL MODE drive. In MODE the Mega Drive is a complete alternative B drive, and in MODE 2 the Mega Drive will format up to 800K per disc. The Mega Drive is fitted with a side select switch as standard, to allow switching between side A and side B of your 3.5" discs. The Mega Drive is compatible with almost all other computers, so that if your change your computer you can transfer your Mega Drive. You will of course require another connecting lead. The power supply is external and can be purchased separately for £9.95.

Write or Phone for **FREE Catalogue**

SPECIAL OFFER 40 X 3.5" Discs & Disc Box

£29.95

o minima modecis	
3.5" Discs (Unbranded) (10)	£7.95
3" Discs Amsoft (10)	
3" Plastic Cases	£5.95
3.5" Disc Box (Holds 40)	£7.95
3.5" or 3" Head Cleaner	£4.95
Printer Lead	£7.95
Joy Stick Splitter	£9.95
464 Extension leads	£12.95
5128 Extension leads	£18.95
464+/6128+ Extension leads	£12.95
Power Supply (Unregulated)	£9.95
Power Supply (Regulated)	£14.95
5128 User Manual	£18.00
CP/M Plus System Disc	£17.95
CP/M 2.2 System Disc	£17.95
5128 Service Manual	
5128/464 Plus Service Manual	£15.95
464 Service Manual	£12.95
3.5" TEAC Mechanism	
CPC464 Cassette Mechanism	£14.95
Magnum Light Phaser	£14.95
MADA IDAZ ID	20.05

MP3 TV Tuner

The MP3 TVTuner fits perfectly under your CTM644 colour monitor and gives a perfect television picture (subject to good receiver conditions). Can be used to play Video Recorders or other computers requiring television display. Can be used on the CTM640 monitor with extra PSU. MP3 Plus available...

CTI Radio/Alarm/Clock

The CTI Radio/Alarm Clock sits perfectly under the Colour Monitor. Being powered from the mains it does not require any connection to your computer. The radio covers FM/MW/LW bands, and the Alarm Clock has a very clear digital display. The CTI matches perfectly with the MP3 TV Tuner and can be purchased together for....£39.95

DDI-1 Interface

We have a very limited quantity of DD1-1 interfaces which can be purchased with our 3.5" Mega Drive to connect to your 464 as the 1st Drive.

OUR COMPREHENSIVE RANGE OF PCW DRIVES

We have industry standard 3.5" drives to suit your every PCW need. We have internal and externals, basic types and some that sing and dance for you and we have them for all PCW models. They incorporate top quality TEAC mechanisms. All our drives are designed in house to suit your needs and use only top quality parts and materials. They are supplied with full step by step fitting instructions and carry a full, 1 year RTB warranty. Our external drives utilise the 12 volt line for reliability and are housed in sturdy metal cases and finshed in a fine ivory texture. All our external drives are made to detach outside the PCW for ease of transportation and to allow them to be used on other PCWs and other computers such as the PC.

INTERNAL ABBA 9 £89 95

Fits into the B drive compartment of the 9512 to provide a 3.5" B drive. Its incorporated ABBA switch allows it to be logically swapped over with the 3" A drive so that the A becomes the B and vice versa. Booting up can be done from whichever drive is in the logical A position.

EXTERNAL ABBA 9 £89.95

This is the external equivalent of the INTERNAL ABBA 9 for those who don't wish to fit an internal drive. All features

DOUBLE DECKER DOUBLE DECKER

2 DRIVES IN 1 CASE only £149.95

For use on the 8256 and 8512 with 2 internal 3" drives fitted. Built in switches allow the selection on internal 3" or external 3.5" A drive and internal 3" or external 3.5" B drive. Booting up can be done from either 3" or 3.5" disc. You can choose to store your data on 3" or 3.5" discs whether A drive or B drive. The addition of this top of the range model to your PCW will give you all the versatility and choices you ever wanted and then some!

256K memory upgrade Extra leads for external drives .£POA

Due to cancelled order we can offer a limited number of 3.5" Panasonic

External MFD1E Economy Disc Drives

Fits into the 9512's A drive compartment to replace a faulty 3" A drive. It can also be fitted into the B drive compartment and used as a B drive. An internal switch decides whether it operates as an A or B drive. Should the 3" A drive become faulty then flicking the switch will immediately set the INTERNAL 9 as a replacement A drive.

INTERNAL 8

This model is the equivalent of the INTERNAL

£79.95

EXTERNAL MFD2

For use with the 8256, 8512 and 9512 with two disc drives fitted. When connected, it becomes an alternative B drive to the internal 3" and has switch fitted to allow the selection of external 3.5" or internal 3" B drive. We chose the reliable manual switch rather than the auto switch which can cause inadvertent formatting of important discs. Is detachable without the need to open the PCW which helps when moving the PCW. This feature allows the MFD2 to be used on other computers, e.g. PCs. We supply extension lead adapters for this purpose

EXTERNAL MFD1

This drive is identical to the MFD2 but without the facility to select external 3.5" or internal 3" B drives. The MFD1 is therefore suitable for single drive versions of the PCW 8256 PCW8512 (with internal B drive disconnected) and PCW9512.

Microform 191 Watling Street Road, Fulwood, PRESTON PR2 4AE

Phone: 0772 701248 Fax: 0772 703131

SAME DAY DESPATCH ON ORDERS PHONED IN BY 3.00p.m. All prices are fully inclusive for UK and BFPO delivery. Overseas orders P&P extra. ALL MAJOR CREDIT CARDS TAKEN.

Finding Keypresses

We thought it was about time we shared some of the arcane mysteries of game cheats. Here's veteran **POKE-er, Lee Rouane.**

Have you ever read lovingly through your monthly **AA**, (I always do. – Ed) come across Cheat Mode, and looked jealously over the keypress cheats? Some people look with wonder and attempt to work out how anyone could have come up with the idea of pressing such a sublime combination of keys. This is a little misguided. What actually happens it that the budding hacker goes through the code, and finds the keypress cheat the other way round. Let me show you how it's done...

Have a quick look

First off, just in case, you might like to glance idly through the code by using a HackIt/Multiface.

typing them in on the menu screen of the game in question, or holding down all the component keys at various points in the game. If this doesn't work, it means the guy who wrote the game had a little sense, and you'll have to resort to slightly more technical means.

Let's get technical

For the sake of an example, we're going to use the Multiface coupled with the Insider, and the one and only Hong Kong Phooey game. Without further ado let's load up the game, and hit the switch.

Firstly, we're going to search for a string of the byte &FF. I know it seems a little irrelevant right now, but all we become clear in time. All you need to know for now is to note down the addresses at which they occur.

ED, and 78 (all in hexadecimal), which translates as follows:

OUT (C),C

Next, search for the bytes ED, 49, 06, F4,

LD B,&F4 IN A.(C)

This is a standard keyboard input routine. In

our working example, we find it occurs at &040A. So let's look for the few bytes before that address, and see what they hold:

0704 11 0E 00 LD DE.8000E 0707 CD 88 04 CALL &0488 070A 11 F6 FF LD DE,&FFF6

The byte to note in the above listing is at &070A. This tells you that the keyboard is being scanned, and the result is being held at &FFF6. This can be confirmed as the keyboard routine by looking back at the addresses of the ten FFs that you searched for earlier, and if &FFF6 is one of them, then you have located the keyboard scan. Of course this can be the movement keys, but if we don't try, we'll never find anything - a bit of perseverance is what's needed here,

Right... It's about time we got





down to looking for the actual keypresses here. so off we trundle, and search for the bytes CD, 04, and 07 (which translates as CALL &0704. the jump to the routine we just found). You should, all going well, come up with a few address. Disassemble around the addresses, and you should find the following (alternatively, go straight to it, as we've just pointed it out):

80C2 CD0407 CALL &0704 80C5 3AFEFF LD A, (&FFFE) 80C8 CB47 BIT 0.A

This is actually the menu routine. Now, one of the addresses here (with a little prayer), hopefully the &FFF6. (You don't seem at all confident about this Lee – Si) So now we know the programmer has used the bytes at &FFF6 for a buffer (to store key presses). So now we need to construct a little diagram about that little row of bytes. that looks a little like this (Well, exactly like this, really - Si):

Block	0	1	2	3
Address	FFF6	FFF7	FFF8	FFF9
Block	4	5	6,	7
Address	FFFA	FFFB	FFFC	FFFD
Block	8	9		

Using the diagram you can now tell (hopefully!) that block 6 is located at &FFFC and so on. Now if you are not yet lost (I am!), lets start going through the code from &80C2. At &80C2 a call is made to the start of the keyboard scan at &0704. At &80C5, a check is made if a key is pressed, ...

Address FFFE FFFF

the best part - at &8008 it checks what key is being pressed, and to find this out, you multiply the block number by eight (always multiply by eight), and then add the key number to find out the key pressed.

Confused? Yes, frankly

Put another way, the address at &80C5 is the one that you compare against your diagram, so FFFE would yield block number 8. The BIT 0,A at &8008 means that key 0 (BIT key, A) is being checked. So after a couple of sums we have Block 8*8+Key 0=64 and after a quick look at the manual, key number 64 is 1. So that means that we have found out where the number 1 in the options menu is checked. Good, eh?

Don't stop now...

Carry on down the listing doing this until you have found the three option keys (keys 1,2 and 3) being checked. At &800E the main keypress is being checked for, but instead of using the BIT x,A method, the programmer changes style. (Perhaps to prevent nosey hackers? - Si) and he starts using the AND method to give the required key. The AND method is a bit more confusing. AND 01 checks key zero, AND 10 checks key four, AND 80 checks key seven etc..., but don't worry if you cannot understand how the key is worked out as I have provided a table below.

Key - 0 1 2 3 4 5 6 7 AND-1 2 4 8 10 20 40 80

So AND &10 would be key 4 and so on. Still

listing a few bytes more and the main keypress routine starts at &80DE. This is how the keypress is worked out:

Just routine

SODE LD A. (FFFB) : Block S 80E1 AND &08 : Key 3 so block 5*8+ key 3= 43 = Y 80E3 JR NZ, &80BF : If no key pressed restart 80ES LD A, (&FFFA) 80E8 AND 804 Key 2 so block 4*8+ key

2= 34 = 0 80EA JR NZ, &80BF

88EC LD A, (&FFFC) : Block 6 80EF AND &10

Key 4 so block 6*8+ key 4= 52 = G

80F1 JR NZ, &80BF

80F3 LD A, (&FFFA) : Block 4 80F6 AND &08 Key 3 so block 4*8+ key

3= 35 = I

80F8 JR MZ, &80BF : Restart

The code then carries on with other parts of the game, but as you can see the word Y,O,G,I has been found, and if you exit Tearaway, hold down these keys on the options screen, and, Eureka!! (Phew! it worked! - Si) You now have infinite lives. This replaces the keypress for this game that was widely known as T, H, U, G, and I. The reason that this keypress works as well is due to the keyboard matrix and the way the CPC works out what key is being pressed - some combinations of keys can reproduce the same effect as others. Anyway, I hope you found that useful, as the same principles we've seen here can be applied to many other games - not just Hong Kong Phooey. Cheerybye!



Looks like we're back in black (and white) with the **POKEs chaps, forget the** type-in pages and dust off your typing fingers 'cos here comes this month's batch..... Take it away buds.

Crystal Kingdom Dizzy

Graham Smith has kept up his end by supplying his usual batch of great POKEs. this time he has done a cheat for Crystal Kingdom Dizzy which gives infinite lives. There's also one for the AA87 Covertape game, Nexor.

- NAKP 1. 'Crystal.Kingdom.Dizzy-By.Graham.Smith JAJA 10.DATA.21,09,be,22,9d,98,c3,00,98,cd,30
- JAPD 20.DATA.fe,01,10,00,11,00,c0,21,1e,be,ed
- JAGI 30.DATA.b0,21,00,c0,22,27,fe,c9,cd,30,fe
- IALG 40 DATA 21,18,02,22,7c,92,21,30,fe,22,27 DACH 50 DATA fe, c9
- IAMF 60.DEFSTR.a-e:FOR.j=&BE00.TO.&BE2D
- IAKA 70 READ a: POKE . j, VAL("&"+a\$):NEXT
- JAIL 80 a=STRING\$(25,42):b="*"+STRING\$(23,32)
- HABL 90 PRINT"Infinite lives
- IAFG 100 PRINT"CRYSTAL KINGDOM DIZZY
- PAPP 110 PRINT"Insert game tape": MEMORY & 7FFF :LOAD"":CALL . &BEOO
- LACM 1.1.AA87.cover.tape.by.Graham.Smith.... PADC 2: 'works on tape or programs saved to d
- AAKH 3.2



- MAOM 10.DATA.21,09,be,22,6f,87,c3,ea,80,af,32, f0,23,c3,b8,02
- ABFB 20.DEFSTR.a-e:FOR.j=&BE00.TO.&BE0F:READ. a:POKE·j,VAL("&"+a\$):NEXT
- MALJ 30 c="-.Infinite.lives":d="Insert.game." PAHO 40 PRINT"Insert game";: IF PEEK (48247) = 20 7.THEN.PRINT"tape"
- PAHA 50.GOTO.60.ELSE.PRINT"disc"; "Press.ang.k ey":CALL:&BB18
- JAHH 60 MEMORY . & 7777 : LOAD menu : CALL . & BEOO .

Quattro Fighters

Dunstable's Andy Price has found yet another Quattro compilation to add his ever expanding list of conquests. This time its Quattro Fighters that gets the treatment (Andy tells me that he has yet another **Ouattro POKE in development for next** month - so we'll look out forward to that)

SAS Combat Simulator gets Infinite lives. grenades, less people and easier fighting. Mig 29 gets infinite lives.

Guardian Angel you can pick the amount of lives

Turbo Chopper gets infinite lives.

Turbo the **Tortoise**

In addition to these Andy has supplied a tape POKE for Turbo The Tortoise which supplies

- LADI 1. '. Quattro Fighters Compilation
- FADB 2. '. Codemasters AARH 3.
- HAAK 4.7.by.ANDY.PRICE,...31.Jan,.1993
- AAMH 5.4
- LAAI 10 . MODE . 1 : LOCATE . 12 , 1 : PRINT "QUATTRO . FIGH
- IADO 20 LOCATE 14,3:PRINT"by ANDY PRICE"
- MAIK 30.LOCATE.5,7:PRINT"1. Mig.29.Soviet.Fig
- KAGC 40 LOCATE 5,8:PRINT"2. SAS Combat Sim"
- KAFL 50.LOCATE.5,9:PRINT"3. Guardian Angel"
- LADP 60 LOCATE S, 10 : PRINT 4. Turbo Chopper Si
- MAON 70 LOCATE . 5,12: INPUT "Enter . POKE . number : "
- GACH 80.0N.ap.GOTO.110,260,580,440 DAPL 90 PRINT CHR\$(7)
- CABH 100 GOTO 70
- GAAI 110 DATA 2a, 38, bd, e5, ac, e1



Oh, we do like to be beside the seaside. Especially in this lovely blue car. What is it?

- GAKB 120.DATA.22,2b,be,ad,21,37
- GAJC 130 DATA bd, 3e, c3, 77, 23, 3e
- FAAN 140 DATA 23,77,3e,be,23,77
- FANE 150 DATA 21,40,00,e3,11,00
- GAHH 160 DATA bb, 00, c3, 4a, 3a, af
- FAFM 170.DATA.32,c8,08,32,f1,0c FAIH 180 DATA cf. 00.00.00.00.00
- DAEJ 185 RESTORE 110
- FAII 190 FOR x=&BE00 TO &BE2C
- FAJJ 200 READ as:a=VAL("&"+a\$)
- HAPO 210 POKE .x,a:chk=chk+a:NEXT
- FAGH 230 MEMORY & & 2FFF : LOAD""
- CAPP 240 · CALL · & BEOO
- HAIF 250 PRINT"Error in POKE"
- FAEA 260 DATA 2A, 38, BD, E5, AC EAPO 270 DATA E1,22,33,BE,AD
- EAFO 280 DATA 21,37,BD,3E,C3
- EADM 290 DATA 77, 23, 3E, 23, 77
- EACN 300 DATA 3E, BE, 23, 77, 21
- EAMJ 310.DATA.40,00,E3,11,00
- EACO 320 DATA BB,00,03,44,34
- EAMN 330.DATA.3E,FF,32,86,32
- EABN 340 DATA 32.8B.32.AF.32
- FANA 350 DATA AA, 49 EE, 38 AF
- DAOL 360 DATA cF,41,50
- FALE 370 · MEMORY · & 3A00 : LOAD ""
- DALJ 375 RESTORE 260 FAIM 380 FOR ad=&BE00 TO &BE34
- FADK 390 READ as:a=VAL("&"+a\$)
- GAHJ 400 POKE ad a c=c+a:NEXT
- CAPP 420 CALL &BE00
- GAEF 430 PRINT"Error!!":STOP
- FANC 440 MEMORY & 3A42: LOAD"
- DAGJ 445 RESTORE SOO
- FAFG 450 FOR a = & BE00 TO & BE28
- FAEK 460 · READ · b\$: b=VAL("&"+b\$)
- GAMD 470 c=c+b:POKE a.b:NEXT
- DAGA 490 · CALL · & BEOO
- FADK 500 DATA 2A, 38, BD, E5, AC, E1
- FACH 510 DATA 22, 27, BE, AD, 21, 37
- FAMI 520 DATA BD, 3E, C3, 77, 23, 3E
- FACH 530 DATA 22,77,3E,BE,23,77

before but so what, it's really good - On the title screen, hold down T O D (the border will flash) then during the game then hold down SHIFT+1 to return to the start of that level SHIFT+2 to advance to the next restart point SHIFT+3 to load the next level. Thanks Arch.

FAAD 540.DATA.21,40,00.E3.11.00

FAPJ 550 DATA BB C3.44.34.4F.32

EABP 560 DATA DD, 7D, CF, 00,00

FABB 580 DATA ED, 5B, 38, BD, D5

FAGA 590 DATA AA D1 ED 53.2D

EAAP 600 DATA BE. A5.21.37.BD EAKN 610 DATA 3E, C3, 77, 23, 3E

EALN 620 DATA 25,77,3E,BE,23 EAAL 630.DATA.77,21,40,00,E3 EAAM 640 DATA 11,00 BB,00 C3 EAEN 650 DATA 4A, 3A, 3E, 09, 32

EAKN 660 · DATA · 6A, 91, 41, 50, CF FAMD 670 MEMORY - 83000 : LOAD" !

FAFH 680 · FOR · a = & BEOO · TO · & BE2C

FADN 690 · READ · p\$:p=VAL("&"+p\$)

IADO 720 · INPUT"Number · of · lives"; z

GAHE 730 POKE & BE26, z: CALL & BE00

Reckless Rufus

The codes for all the levels on Part 1 are:

The password to Part 2 of the game is – 2435

Baby Jo

Galactic Plague

Plus an age old tip for that bastion (have I spelled

which somehow seems to have evaded the cheat

mode pages - Galactic Plague - Hold down R to

Indiana Jones

And The Last

Crusade

Michael

Aspell. Curiously

dad's

Archie has also sent a cheat for *Indiana Jones*

And The Last Crusade which has appeared

that right?) (Yes. - Ed) of Amstrad game-playing,

Archie Fulton from Brae in Shetland has

supplied the passwords to Baby Jo.

They are YOUPI, GLOUP and MUMMY.

HAAH 740 PRINT"DATA error": STOP

GAAI 700 POKE a, p: y=y+p:NEXT

DADK 675 RESTORE - 580

LEVEL 11 – 4529

LEVEL 21 - 8769

LEVÉL 31 - 6260

LEVEL 41 - 0942

LEVEL 51 - 3392

LEVEL 61 - 9744

advance a level.

FABP 570 PRINT"DATA error"

Atom Ant

Meanwhile south of the border in Twyning (is that where the tea comes from) Antony (dead ant) Stanley has been playing with what else but Atom Ant and discovered a fine keypress:

On the title screen hold down the keys MONSTER and you will get a dose of invulnerability.

Ant also suggest that if you hold down fire whilst running on Street Cred Football you go faster!

Cerebus

Slightly further south still, in Allora Queensland Australia, Space Crusader Fraser Clark has discovered that on the game Cerebus if you hold down the keys KEVIN you will become invincible.

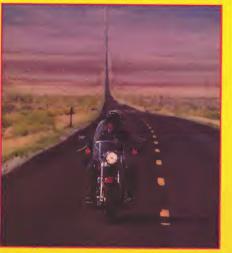
Space Crusade

Gary Lewis of 20 Lancaster Tce, CHESTER-LE-STREET Co Durham DH3 3NW, produces a fanzine called AM-COM and would like a mention for it. Obviously I can't use up vital Cheatmode space for that, so instead here is a cheat he's found for Space Crusade:

The marine with the assault cannon has an infinite re-fire option. If, when he fires, he fails to destroy the alien a re-fire option may come up. When it does, click onto your marine again and fire on the alien you didn't eliminate. A new set of numbers should come up. Keep repeating this option until you wipe out the alien. Also after you've done this (even if the re-fire option in the top right of the screen is gone the fire icon at the bottom should still be highlighted. You can blast the aliens as much as you like. You lose this when you end your turn, but can repeat the method on future turns.

Myth, History **InThe Making**

We like to help out when people ask for help with games especially, when the games they ask for are real goodies like Myth, History In The Making. Back in 1990 Kevin Hoy of Bootle sent us this solution to the game, and here it comes again for



Here's a chap riding through the dessert on a Harley. No, sorry, that's 'desert'. Here's a chap riding through the desert on his dessert.

all you new history makers:

Stage 1: The Road to Hell

Kick the two jars on either side at the start and collect the contents

- Go left, select fireball and shoot the hanging corpses.
- Smash the jars and collect the contents. Skeletons will drop from above, shoot them and collect the skulls.
- Go left and immediately shoot the gargoyle, use heart to protect yourself.
- When defeated, shoot the orb until it falls, then
- Go right shooting corpses and collecting
- Use the heart when confronted by the
- gargoyle and move directly underneath.
- Select fireball then jump in between him spitting and shoot him.
- Fire at the orb until it falls then collect it.
- Go left and drop down.
- Go right, shoot the hanging corpses, go right and collect the orb.
- Go left shooting kicking and collecting all you find, and drop down.
- Make sure you have collected ten skulls then
- Select skulls as your weapon and throw ten into the fiery pit, select fireball.
- The devil will rise, shoot him repeatedly until he explodes. A platform will appear, collect the trident and
- Go right collecting, and at a second fiery pit a
- platform will appear. Select the trident and go right, shoot the
- dragon repeatedly. Collect the key and move left, climbing
- upwards to the door. • Select the key, the door will open, move
- through the door. Select the heart drop from the ledges and collect the orb.
- Go right out of the door and drop from the ledge.
- Go to the right, collect the master icon. →

TWIN PEAKS

Don't ask me mate, I only work here. I was out when they decided to use these pictures.

• Return to the start position (teleport pad) and select the master icon.

Stage 2: Greece 400BC

- Destroy the statue with your sword and collect the fireball and the orb.
- Ignore the jar then go right collecting articles as you go.
- Hit the statue of Achilles on the heel six times and collect the bag.
- (Now is this Achilles or is it Perseus?)
- Go right break the jar and chase the dove (extra life).
- Go right and cautiously move forward the lady will transform.
- When she does hide behind the pillar and wait for her to rise.
- Move left off the screen and back again she will have gone.
- Go right and collect a dove and an orb, then right again and collect a third.
- Move right and jump to the temple and kneel (left + fire + Sword Icon).
- You are transported to Medusa's . Protect yourself with your shield.
- Move forward cut off her head with the sword, select the bag.
- Collect Medusa's head then the orb.
- Go left then right to encounter the Hydra and select the Medusa head.
- Destroy the heads, collect the orb and return to the temple and kneel.
- Collect the master icon and return to the teleport pad.

Stage 3: Scandinavia 500AD

- Kill all the Vikings until one leaves a fireball,
- Go right, collect the orb and get transported ashore
- Jump up to the jar and collect the contents.
- Go left shoot the trolls and collect the knives.
- Keep moving left and collecting until you find the orb.
- Collect the lightning and the orb.
- Go right and climb the platforms to collect the

scrol

- Go right and use the scroll to make rain and put out the fire.
- Release the lady and she will reveal a key, collect it
- Go right and collect the orb.
- Go right collecting and you will confront the dragon.
- Select the knives, get close between fiery breaths and destroy it.
- Move right and collect the orb.
- Go right and select the key to lower the drawbridge.
- Enter the castle and use the lightning to destroy Odin, shoot his feet.
- Collect the orb, go left collect the master icon in the forest.
- Return to the Teleport pad.

Stage 4: Egypt 3,000BC

- Don't enter the water, select the gun, go right and shoot twice.
- Enter the pyramid, go down the steps and drop off the ledge.
 Below there are four doors (1 nearest the wall
- and 4 farthest away).
- Enter door three first by crouching (same as kneeling in Greece).
- Jump across the pit and collect the mask from the chest.
 Jump over the spikes kick the jar and collect
- the gun.

 The floor is booby trapped so jump right and
- collect the ankh.
- Move to between the two sarcophagus' and select the ankh (extra lives).
- Return to the four doors and select door two.
 Watch out for folling clabs, collect the frehall.
- Watch out for falling slabs, collect the fireball and the gun.
- Move to the next screen and collect the orb.
- Move to the next screen and jump the pit, don't land on the first slab.
- Collect the eye from the chest, go to the next screen and get the jar.
- Return to the doors and enter number one, watch out for falling slabs.
- Collect the gun, move to the next screen and collect the orb.
- Carry on to the next screen collect the fireball and the second jar.
- Return to the doors, enter number three and jump left.
- Go to the next screen, collect the orb, and on to collect the third jar.
- Return to the doors and select number four.
- Avoiding spikes and falling slabs go to the next screen and collect the orb.
- Carry on walking right to the end of the room and collect the fourth jar.
- Return to the doors and the eye under door five should now be flashing.
- Select the eye and you will transport to a corridor.
 Shoot the mummies with your gun and walk
- right to the sarcophagus.

 Put down the jars, then enter the next room
- and select the mask.Fire at the face of King Tut and he will be

destroyed.

- Collect the final orb, go back to the teleport
- That's it.

Multiface POKES

There has been a bit of a shortage of Multiface POKEs since the mammoth session a few months ago, but they are starting to appear again now... Here are a batch from Peter Curgenven of Trevone bay:

	NAME	ADDR	POKE	EFFECT
	Kettle	8EAD	00	Stops time
	Mr Freeze	7B69	00	Inf lives
	Johny Quest	8883	00	Stops anima
-	Crys King Dizzy	A044	3A	Inf lives 🕳
	Baby Jo (D)	1503	AA	Inf lives
	Bosconian (T)	37D7	00	Inf lives
	Oink (T)	4DF3	00	Inf lives
		4A98	35	Stops time
	Terramex (T)	6821	AA	Inf Lives
	Robin Hood Leger	nd Quest (T)	
		8D6E	3A	Inf lives (Hearts)
		AOF4	00	Inf lives (Numbers)

Microcosmica

And a bunch of Multiface POKEs for the game **Microcosmica** from Simon Avery from Chudleigh:

rocosmica	659A	00	Stops days advancing
	659B	00	No landing
			tax
	74CC	FF	255 lasers
	74CD	FF	255 shields
	74CE	FF	255 exterior
	74CF	FF	255 interior
	74D0	FF	255 Mk 1
			computer
	74D1	FF	255 Mk 2
			computer
	74D2	FF	255 Mk 3
			computer
	4DFA	FF	65,000 credits

Simon has also supplied a list of the items required by citizens of various galaxies:

Galaxy 3 – Rainbow door

Galaxy 4 – Weavers dream Galaxy 5 – Roger's cash book

Galaxy 6 – Willigen's vortex

Galaxy 7 – New DMP 1 ribbon Galaxy 8 – New 6502 boiler Galaxy 9 – Red herring

Please send your cheats and stuff to the usual address and you might win a prize. ●

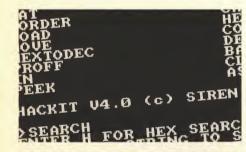
Poking Back

Keypresses might not be enough. Simon Forrester dusts off his POKEing fingers and goes looking for some other cheats.

So you've learnt how to search for keypress cheats. But what about the Multiface pokes? If you do actually have a game that wasn't listed in the huge Multiface feature in issue 90, or there's a new one just been bought out that you feel like taking on, here's how to go about it:

It's important that you know from the absolute start exactly how a game works when it comes to lives, time, and other stuff that counts downwards. In machine code, there are a few standard routines that are commonly used to decrease numbers — it's those that we're looking for. All we have to do is track down the routine that decreases the numbers.

So let's begin by taking a game that we all



Adapt And Survive

Of course, the routine we searched for in Chuckie Egg wasn't the only type of routine we can look for. If you're poking a game, and you don't have any joy with the routine, try looking for a few of the following:

п	111			DD HD; audi
	35			DEC (HL)
Į	21	??	??	LD HL,addr
l	7E			LD A,(HL)
ı	3D			DEC A
	77			LD (HL),A
ľ	3A	??	??	LD A,(addr)
N			SUB	
I	32	??	??	LD (addr),A

The number in italics, buy way, is the number to be replaced with 00, in order for the poke to work.

know and love, and more importantly, all have – *Chuckie Egg.* Yeah yeah yeah, I know it appeared in that issue, but I poked it hundreds of years ago, and I'm going to do it again. So load the game up, and off we jolly well go!

As you can see from playing the game, the main thing we want to stop counting down is the life counter. If we can achieve this, when you die, you won't actually lose the life, just start again.

And we're going to do pretty much this whole thing with only a search routine to keep us company – there are hundreds of utilities with search functions around, such as Multiface, Hacklt, *Maxam*, and, well, you name it, really!

Right, reset your machine, and type the following:

MEMORY &7FFF LOAD "CHUCKIE.BIN".&8000

This should have loaded the main game code into memory. I suppose, if you've got a Multiface or a Hacklt, you can just run the game and freeze it, but if you haven't, that's how to load the game into memory and still have control over your machine.

So now we need the search routine. If you've got a BASIC program, then run it. If you've got a menu option, then select it. We're searching for the following bytes:

3A ?? ?? 3D 32 ?? ??

The question marks indicate mystery bytes (or wildcards), that we don't specify, because we don't know the address they're going to hold. The last two mystery bytes could, in effect, be left off altogether, but for the sake of understanding, don't knock them off just yet. Those numbers actually disassemble into the following:

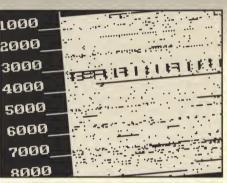
LD A,(addr) DEC A LD (addr),A

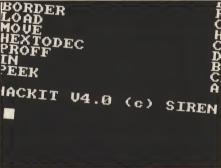
The number represented by the addr is actually the memory address that contains the life counter, so the value is loaded into A, decreased by one, and put back again. The easy way to kill that part of the program without upsetting the rest of it is to replace the DEC A instruction with a NOP (no operation) instruction. So now you have to sit and work your way through the list of bytes your searcher found, replacing each dec with a nop, and testing it, to see whether you have infinite lives.

Right – because we don't have the time or the patience to sit and go through each one in turn, I can now reveal to you that the offending routine is at &9858

9B58 3A 5C 7B LD A,(&7B5C) 9B5B 3D DEC A 9B5C 32 5C 7B LD (&7B5C),A

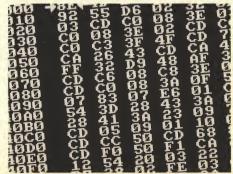
So to replace the DEC A with a NOP, we need to poke &9B5B with 0. And hey presto, there's your infinite lives poke! lacktriangle











Future Publishing Limited, 30 Monmouth Street, Bath, BA1 2BW Tel: 0225 442244 Fax: 0225 446019

Editor Tim Norris **Art Editor** Nick Aspell **Staff Writer** Simon Forrester ors Phil Howard, Richard Fairhurst, Tim Blackbond, Lee Rouane

Photography Rob Scott Cover Illustration Graham Puckett Senior Ad Sales Executive Jackie Garford Trainee Ad Sales Executive Robert Bennet **Publisher** Colin Campbell

Promotions Assistant Tamara Ward Group Publishing Director Greg Ingham **Production** Craig Broadbridge Lino and Scanning Simon Chittenden,

Jon Moore, Chris Stocker, Simon Windsor Heath Parsons, Mark Gover, Nick Harvey **Subscriptions** Christine Stacey tel: 0458 74011

Circulation Manager Jon Bickley, tel: 0225 442244

© Future Publishing Ltd 1993 Amstrad Action is an independent publication. The company producing it –
Future Publishing Ltd – has no connection with Amstrad plc. We cannot guarantee to return material submitted to us, nor can we enter into personal correspondence. We take great care to ensure that what we publish is accurate, but cannot be liable for any mistakes or misprints. No part of this publication may be reproduced in any form without our explicit written permission.

Printed in the UK



'Your guarantee of value'

This magazine comes from Future Publishing. We offer:

Better advice. Our titles are packed with tips, suggestions and explanatory features, written by the best in

ws. We have a cast-iron policy of editorial ndence, and our reviews give clear buying

Clearer design. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs etc.

Greater relevance. At Future, editors operate under two golden rules:
• Understand your readers' needs.

More reader interaction. We draw strongly on readers' contributions, resulting in the liveliest letters pages and the pest reader tips. Buying one of our magazines is like joining a nationwide user group.

Better value for money. Magazines you can trust.

Home of Britain's finest magazines. Your Sinclair . Commodore Format . PCW Plus . PC Plus . PC Answers .

PC Format • Amiga Format • ST Format • Sega Power • TOTAL! • Amiga Power • Amiga Shopper • Super Play • Mega • GamesMaster • Mac Format • Future Music and also Classic CD • Mountain Biking UK • Cycling Plus • Needlecraft • Cross-Stitch Collection • Caravan Plus and

Amstrad Action recognises all copyrights contained in this issue. Where possible we have acknowledged the copyright holder.

Please feel free to contact us if we have failed to credit your copyright - we will be happy to correct

ABC 27,090

Member of the Audit Bureau of Circulations July '92 - Jan '93

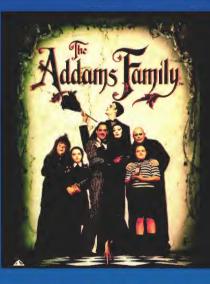


At all good newsagents...

On The **Tape**

At the time of going to press, we can't reveal the serious package for you, but we can tell you that the B-side will almost definitely be a fab little game called Biff, featuring the adventures of a happy voung individual called, funnily enough, Biff.





On The Lookout

As usual we'll be having the usual scout around for any new releases, and we can already tell you that one of these will be the budget re-release of *The* Addams Family. We may (emphasis on 'may') have a preview of Street Fighter II at some point.

On The Hot Spot

We talk to those wonderful chappies at Campursoft, and take a look at what they've got coming your way in the very near future you may even get to see their fabulous new hard drive! Here's hoping!

On The Road

We'll be covering objects and puzzles next month in Venture Forth, so get your brain ready to be twisted in knots.

On The Hop

Cheat Mode returns in all its glory, with the regular selection of hints, tips, pokes and keypresses. So if your aliens just won't die, or your time keeps running out, we've got the poke for endless life, health, and the cure for gout. (Oh dear. – Ed)

On The Cheap

Public Image makes a fabulous comeback with even more goodies to fill your discs, and keep you entertained for yet another month.

August issue on sale July 22nd

NOW A TOTAL MOUSE/ GRAPHICS PACKAGE



Genius Mouse

COMPLETE



>>>>> SPECIAL OFFER PACK!!

- Genius Mouse is a high resolution two button mouse featuring optical counting, teffon guides, microswitches, rubber coated ball and high quality interface.
- When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...
- Create an image shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.
- Spray patterns or shades, make elastic lines stretch and manipulate shapes. Zoom in to add detail in fine mode.
 Full cut and paste facilities plus excellent printer support.
- Pulldown/Icon driven menus for ease of use.
 Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes so flexible anyone can create superb graphics easily.

COMPLETE WITH MOUSE INTERFACE The Genius Mouse Graphics

- System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour. Simply plugs into Expansion/Joystick port.

TOTAL PACKAGE

INCLUDES GENIUS MOUSE. INTERFACE, OCP ADVANCED ART STUDIO PLUS FREE MOUSE MAT AND HOLDER

TAPE OR DISK FOR 464 OR 6128 (PLEASE STATE WHICH **REQUIRED) N.B. 464 NEEDS DK'TRONICS 64K RAM PACK**

FOR YOUR

AT A TRULY

UNBEATABLE

AMSTRAD

PRICE

MOUSE MAT AND **MOUSE HOLDER** (WORTH £12.99) WITH EACH PACKAGE



LC 200 COLOUR PRINTER PACKAGE

NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC200 Colour Printer not only prints in Near Letter Quality for your regular jobs but also prints out your pictures from Art Studio, etc., in genuine colour!
- LC200 is a full Centronics printer so it works with other computers (Amiga, ST, etc.).
- Made possible by Datel's unique colour printer driver now you can have a hardcopy in up to 16 colours! • No more to buy - just plug in and print!!

PACKAGE INCLUDES... STAR LC200 COLOUR PRINTER RRP £299.00 CENTRONICS PRINTER LEAD RRP £9.99 DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99 NORMALLY £327.98

COMPLETE PACKAGE NOW ONLY £239.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately



- Simple plug in memory expansion gives instant extra memory • Features bank switching software for easy use by the programme
- or for use as a data storage area. Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K.
- 64K unit brings 464 up to CPC 6128 memory configuration
- making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio
- Bank switching done automatically by software (cassette 464).

ONLY £49.99 64K FOR 464



HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] 0782 744707 CREDIT CARD ORDERS

RDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO.. ELECTRONICS

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, IMITED ST4 2RS, ENGLAND. FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

DATEL LONDON SHO

222, TOTTENHAM COURT RD, LONDON, W1, TEL:071 5806460

AMSTRAD ACTION July 1993